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UNITED STATES DEPARTMENT OF LABOR
W. N. DOAK, Secretary
BUREAU OF LABOR STATISTICS
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Contents

This Issue in Brief

The printer telegraph has reduced the proportion of Morse telegraphers in commercial telegraph offices to 21.5 per cent of all operators, according to a study by the United States Bureau of Labor Statistics. By 1931 printer circuits accounted for nearly 90 per cent of all commercial message handlings of one large company. The proportion of male operators has been reduced from about 80 per cent to about 40 per cent of all operators. In the principal telegraph offices the productivity of printer operators averages about twice that of Morse operators, with a resulting technological displacement amounting to about 50 per cent. Page 501.

Fluctuations in employment in Ohio in 1930 were greater among males than among females in the wage-earning group but greater among females in the clerical and sales groups. A complete analysis of the employment fluctuations in the various industries in Ohio in 1930, with comparisons with earlier years, is given in an article beginning on page 516.

The first work-insurance law adopted by any American State was enacted by the Wisconsin Legislature in January, 1932. A compulsory act will become effective on July 1, 1933, unless prior to that time the employers of the State shall have established some voluntary unemployment-insurance plan approved by the State industrial commission. The act covers all employers employing 10 or more persons for 4 or more months during the preceding calendar year, with certain exceptions. The unemployment reserve fund is to be made up of contributions by the employer at the rate of 2 per cent of his annual pay roll, until a reserve amounting to $55 per employee has been built up, and thereafter the rate of contribution is reduced to 1 per cent until the reserve amounts to $75. Subject to a waiting period of two weeks, benefits are payable at the rate of $10 a week, or 50 per cent of the average weekly wage, whichever is lower, unless the wage is less than $5 when a benefit of $5 is paid. The maximum period of benefit in any one calendar year is limited to 10 weeks. The act is to be administered by the State industrial commission. Page 540.

The establishment of state-wide systems of unemployment reserves, supported by employer contributions of 2 per cent of pay roll, is recommended in the report of the Interstate Commission on Unemployment Insurance made up of representatives of the governors of the States of New York, New Jersey, Massachusetts, Pennsylvania, Ohio, and Connecticut. Under the plan suggested the maximum rate of benefit would not exceed $10 a week for a total of 10 weeks in any 12 months and the reserves set up in any State would be held, invested, and disbursed by the State. Page 552.

The unemployment insurance and savings plan of the J. I. Case Co., Racine, Wis., put into effect in November, 1931, covers all employees on an hourly or piecework basis who have been employed by the company continuously for a period of six months. The company and the employees contribute equal amounts to the fund until a reserve equivalent to one year's average full-time earnings has been

accumulated. Withdrawals from the fund are allowed only during periods of business depression when the company can not furnish sufficient employment and the employee is unable to secure employment elsewhere. Page 554.

Earnings per hour of workers in the furniture industry in 1931 averaged 41.1 cents and full-time earnings per week averaged $21.29, while full-time working hours per week averaged 51.8, according to a study made by the United States Bureau of Labor Statistics. Hourly earnings in 1931 were 7.9 cents less than in 1929 but 19.7 cents more than in 1915, the date of the last similar study for this industry prior to 1929. Full-time weekly earnings in 1931 averaged $4.14 less than in 1929 and $9.05 more than in 1915. Average full-time working hours were one-tenth of an hour less per week in 1931 than in 1929 and 5.6 hours less than in 1915. Page 644.

A deduction of 10 per cent from the pay check of each employee is provided in the railroad labor agreement of January 31, 1932. The agreement was signed by representatives of 20 of the railroad labor unions and of more than 200 railroads. The wage deduction is to continue for a period of one year beginning February 1, 1932, the basic rates remaining unchanged. Page 612.

The mechanization of bituminous coal mining showed a sharp increase in 1930. In that year the deep-mined bituminous coal produced by means of loading machines, pit-car loaders, and hand-loaded conveyors, increased to 46,824,000 tons, or by 23.7 per cent as compared with 1929. For the country as a whole, the total mechanically loaded product in 1930 amounted to 10.5 per cent of the tonnage produced; in the State of Montana to almost two-thirds of the total tonnage; and in Wyoming and Illinois, to approximately one-half of the total. Page 558.

The United States Supreme Court on February 23, 1932, handed down an opinion upholding the validity of the Federal longshoremen's and harbor workers' compensation act. The majority opinion declared that the findings of the deputy commissioner as to jurisdictional facts such as whether the relation of master and servant existed or whether the injury occurred upon navigable waters of the United States, were not binding on a district court. However, as to all issues of fact relating to the details of the claim made by an injured employee or his dependents under the act the majority opinion held that the findings of the deputy commissioner were binding upon the court if they were not arbitrary and were supported by substantial evidence. Page 577.

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Displacement of Morse Operators in Commercial Telegraph Offices

THE Bureau of Labor Statistics is making a study of the effects of the printer telegraph (the teletypewriter or teletype) on the employment of operators. The most extensive but by no means the only important phase of telegraphic communication may be described as commercial message handling by the telegraph companies. Other aspects, not covered by the present article, include ticker services, especially for market quotations; handling of news by press agencies; railroad telegraphy; and private-wire circuits.

A preliminary report on commercial message handling reveals widely different effects of the printer telegraph in the larger offices (classed as functional offices) as compared with branch offices and other small offices. In the larger offices Morse operators have been somewhat slowly but very largely displaced by operators of printer telegraphs, and the productivity of printer operators is so great that technological displacement approximates 50 per cent of the number of operators who would be required under Morse manual operation. In offices not classed as functional the per cent of technological displacement is lower. In all offices combined the proportion of male operators has been reduced from about 80 per cent to about 40 per cent of the total number, and the skill and training characteristic of Morse operators are supplanted by ability simply to operate a typewriter keyboard adapted to telegraphic purposes.

Changing Methods

THE essential feature of Morse telegraphy, as everyone knows, is the manual operation of a key for opening and closing an electrical circuit. Varying lengths of the interval, with varying sequences of short and long intervals, at first were recorded in the form of dots and dashes of the Morse code at the receiving end on a tape recorder, from which they were translated by the receiving operator into ordinary letters, numbers, and words. It was soon discovered that the operator could translate the signals by sound without troubling to use the code signs on the tape recorder. Specialized "sounders" and "resonators" were devised for accentuating the sound signals and making their translation easier. The tape recorder was thereafter used only when for any reason a code record was desired. The Morse transmitter was simplified and its operation made easier, one result being a reduced frequency of a malady experienced by oper-

ators, a kind of partial paralysis known as "glass arm." Speed of transmission depends, of course, on the speed of reception and transcription. The general use of the typewriter for transcribing messages increased the speed of reception and, indirectly, the speed of transmission.

The displacement of Morse operators resulted largely from efforts to economize in the use of the wire plant. This meant increasing the amount of traffic per unit of wire. The first important economies were under Morse operation—the duplexing and quadruplexing of wires. By duplexing, a message could be sent in each direction. By combining two methods of duplexing, quadruplex operation was possible, though the sending of two messages in each direction was efficient only for limited uses.

Closely connected with economy in use of the wire plant were the early efforts to supplant Morse manual operation by means of "fast" telegraphy, especially the Wheatstone system. The Morse characters were punched by hand on a tape and this perforated tape was fed through a transmitter. Only the actual transmission was automatic in contrast with manual transmission by the Morse operator when he pressed the key. Transmission by perforated tape, on good circuits of not more than about 200 miles, was much more rapid than by Morse manual operation—as high as 400 words a minute as against about 25 words. But the Wheatstone system was limited to relatively short distances having high-grade circuits. Much time was required for punching the tape before transmission and for translating and transcribing the code from the recording tape at the receiving end. Automatic transmission had not only a speed but a mechanical precision and monotony and inflexibility which the variable conditions of the circuit failed to warrant. In manual transmission the operator could modulate the speed in accordance not only with the varying conditions of the circuit but with the varying nature of the material transmitted—for example, words of similar nature, such as "protest" and "protect."

The final success of automatic transmission was to come not through speedier transmission of a particular message (although greater speed was possible) but through increasing the number of messages sent simultaneously over the same wire. Effective transmission by Morse manual operation, under ordinary conditions, was limited to duplex operation, or the sending of one message in each direction at the same time. The multiplex system, while transmitting much more rapidly than is possible under Morse manual operation, also economizes the wire plant by sending as many as eight messages over one wire at the same time, and reduces operating costs by utilizing relatively unskilled operators (typists) in place of Morse manual operators. Furthermore, it economizes in the use of labor by eliminating the process of punching the tape by hand and then feeding it into the transmitter (the manual part of multiplex transmission being confined to operating a typewriter keyboard), and also by printing the message automatically at the receiving end in ordinary characters instead of in code, thus doing away with the relatively skilled operator who, in the Wheatstone system, translated and transcribed the message.

Each key on a typewriter keyboard represents a character, and the depressing of the key sets up an electrical contact which auto-

matically operates the corresponding key on a similar keyboard at the receiving end. The contact may be established by direct keyboard action or by means of a perforated tape which is automatically fed through a transmitter, each set of perforations composing a code character corresponding to a character on the keyboard. At the receiving end the keyboard which automatically prints the message may be a tape-recording printer or a page printer. In either case the message is typed out not in code but in ordinary printed characters. Several receiving machines may be operated on the same circuit by one transmitting machine.

Although it is commonly said that multiplex operation means the sending of several messages over one wire at the same time, this is literally not the case. What happens is a dividing of time on the wire, so that the printers follow each other in rapid succession, one 5-unit impulse (one character) being sent by each printer in turn. It is impossible for Morse operators thus to divide the time on the line because an absolute synchronism of sending and receiving instruments is necessary, and this can be obtained only by mechanical means. The speed limit of the Morse operator, particularly of the receiving operator, would also make a dividing of time on the line relatively of little value.

Briefly, the device which enabled the printer telegraph to outrival the Morse operator was the synchronized distributor for dividing or distributing time on the wire, thus enabling one wire to bear a very much heavier traffic burden than is possible by duplex manual operation. Multiplexing includes duplexing; that is, time on the wire in both directions is divided by the synchronized distributors. The distributor is a motor, revolving on a segmented face plate. Ordinarily there are four segments, each representing a channel of communication. As the distributor revolves, its brushes send and receive one complete letter (or other character) from each of the four channels. The distributor rotates so rapidly that the result is practically to provide four circuits on one wire at the same time; and since duplexing the wire makes possible its use in both directions at the same time, the synchronized distributor of the multiplex system gives in effect eight circuits or channels of communication on one wire.

The successful use of the multiplex system depends on a heavy volume of traffic. Multiplex equipment is economical where the traffic is too heavy for a duplex circuit and where the mileage is so great that the cost of wire is greater than the cost of the multiplex (terminal) equipment. In a word, multiplex operation is adapted to main trunk lines but not to branch lines and trunk lines with light traffic. For this reason the Morse manual system continued in extensive use after the introduction of multiplex circuits. The final triumph of the printer telegraph over the Morse operator resulted from the development of apparatus usually known as the simplex system.

The term simplex is misleading, because simplex printers commonly use duplex circuits. The term is used, however, in contrast with multiplex, for the simplex printers do not divide the time on the wire. In this matter they resemble the Morse manual instruments, on the one hand, and, on the other hand, they are like the earlier unsuccessful printers in use before the adoption of the multiplex system. Obviously, their use on ordinary duplex circuits means that

they compete with Morse manual operators in the one field in commercial telegraphy remaining after the adoption of the multiplex system for trunk-line circuits.

How may the recent successful operation of printer telegraphs on duplex circuits in competition with Morse be accounted for? (For it will be remembered that the prolonged efforts in this direction before the adoption of the multiplex system were unsuccessful.) There seems to have been no one outstanding change. Increasing control of conditions on the wire; the perfecting of the mechanism of the printer to such an extent as to make its operation and maintenance practicable in branch offices and customers' offices with a minimum of supervision; reduced cost of printers and of their operation and maintenance—these are the more important changes contributing to the success of simplex apparatus.

The perfecting of the wire plant and of the mechanism of the printer made possible the synchronizing of sending and receiving ends by means of the so-called "start-stop" method. There is a motor at each end of the wire, the two motors running at synchronized speeds. Signals or impulses for characters are made up, as in multiplex operation, by combinations or permutations of a 5-impulse code. But in simplex operation, in addition to the five character impulses representing each letter or figure sent over the wire, there is a start impulse which releases the printing and transmitting mechanism and a stop impulse which arrests the motor at each end of the circuit. By this device, in contrast with the synchronized distributor of multiplex printers, the sending and receiving parts of the apparatus are kept in synchronism. But since 7 impulses are required (5 character impulses, 1 start impulse, and 1 stop impulse) for the printing of each character, simplex operation requires seven-fifths of the time on the wire that the multiplex requires, and, in addition, uses only duplex circuits.

In commercial telegraph offices multiplex printers generally use indirect transmission; that is, when a key on the keyboard is depressed it perforates a tape in code and the tape in turn is automatically fed through a transmitter. Simplex printers, in commercial telegraph offices, commonly use direct transmission—the depressing of the key sends the character impulse directly over the wire.

With the perfecting of the printer telegraph and of the plant equipment to such an extent as to make possible the economical use of printers on duplex circuits between main offices and branch offices and between company offices and customers' offices, the end of Morse manual operation for the handling of messages by the commercial telegraph companies was in sight. By means of speed and flexibility and low operating cost the printer telegraph has been able to prevail also in some specialized industries, such as that of the news associations, and to compete with varying degrees of success in all industries requiring telegraphic communication.

Transition to Printer Telegraph

INFORMATION about the early stages of the transition to the printer telegraph is fragmentary. The slight extent of its use by 1907 is indicated by Table 1:

TABLE 1.—METHODS OF OPERATING COMMERCIAL TELEGRAPH SYSTEMS, 1902 AND 1907 [1]

Kinds of circuits	1902		1907	
	Miles of circuit	Per cent of total	Miles of circuit	Per cent of total
Single channel	816, 593	62. 5	1, 047, 458	66. 4
Duplex	185, 048	14. 2	239, 278	15. 2
Quadruplex	294, 910	22. 6	266, 337	16. 9
Machine or automatic	10, 495	0. 8	24, 888	1. 6
Total	1, 307, 046	100. 0	1, 577, 961	100. 0

[1] Data are from U. S. Bureau of the Census, Telegraph systems, 1907, p. 14.

The table shows that in both years the wire mileage used for printer telegraphy (0.8 per cent of the total in 1902 and 1.6 in 1907) was much smaller than the per cent of traffic handled by the printers, for only the busier circuits or trunk lines could then be economically converted to printer operation.

It was not till the period of the World War that any considerable proportion of the industry was converted to printer operation. In 1914 the annual report of one of the principal companies mentioned a new development in "what might be termed mechanical transmission." It was stated that "there is now in daily use rapid transmission apparatus which nearly, if not quite, quadruples the most effective yet devised, and is giving great results on the trunk lines where there is a concentrated business between large places." Then followed a hazardous forecast belied by the event: "There is nothing as yet, and not likely to be anything which will supersede the old key transmission of a settled business distributed to many places on a local line."

Changes made by the end of 1918, as shown by the same company's report for that year, were as follows:

TABLE 2.—METHODS OF MESSAGE HANDLING USED BY A LEADING COMPANY IN 1918

Mode of transmission	Per cent of business	
	Beginning of year	End of year
Morse manual	62. 0	47. 0
Automatic telegraph	35. 5	49. 0
Telephone	2. 5	4. 0

The decline in the proportion of business handled by Morse operators from 62 per cent at the beginning of 1918 to 47 per cent at the end of the year was not due entirely, it will be noted, to the use of the printer or "automatic" telegraph. The use of the telephone was increasing at a surprising rate, for before the perfecting of the simplex printer the telephone began to be used extensively for handling telegrams between branch offices and main offices, to take the place of Morse manual transmission.

By the end of 1926, when simplex printers were being introduced, the program of one of the leading companies of converting its trunk

lines to multiplex operation had been virtually completed; by that time, 66 per cent of the traffic was reported as being handled by printers.

Another prominent company experimented extensively with printer telegraphs, but adopted the multiplex printer somewhat later. Its annual report announced in 1923 that printer operation except on multiplex circuits, had proved to be uneconomical; that during 1922 its engineers had perfected a multiplex outfit suited to its needs; that the apparatus had been installed in the New York and Chicago offices; and that plans had been made for the rapid extension of multiplex operation. Conversion of the principal circuits to multiplex printer operation continued till 1928, when the program was merged with, and in a measure superseded by, the installing of simplex printers.

The multiplex system, because of its relatively high cost in terminal equipment, is adapted only to lines between larger centers with constant and heavy traffic, calling for a number of channels of communication. Until 1926 the shorter circuits and branch lines connecting with the trunk lines continued to be operated by the Morse manual method. It was in its annual report for 1926 that one of the leading companies announced the successful use of the simplex printer on circuits to branch offices, intracity circuits, and drop circuits adapted to supplying more than one newspaper with the same news dispatches. In 1927 simplex printers were "in successful operation in 25 important centers." In 1928 they were being installed not only in branch offices but also in customers' offices. By this arrangement a customer was able to telegraph his message to the company's office and have it relayed almost instantaneously to its destination. For economizing both office equipment and operating time there was introduced a so-called concentration unit. This is a selective device which chooses automatically an idle printer in the central office, for receiving a customer's message or for sending a message to a customer. By 1931 about 90 per cent of the company's commercial message handling was by printer (including simplex and multiplex).

Beginning in 1927 another important company also carried out an extensive program of replacing Morse operators with simplex printer operators in branch offices and customers' offices. The traffic handled by its printers (both multiplex and simplex) increased by 1931 to more than 80 per cent of the total.

Effects of Technological Changes on Number of Operators

THE effects of the printer telegraph (multiplex and simplex) and of other changes on employment in functional offices are radically different from their effects in other offices. A functional telegraph office is a larger administrative and operating center, with trunk-line circuits, routing facilities, repeaters, etc.

Messages usually originate in branch offices; in other company offices which, because of size or location, are not classed as functional; in customers' offices equipped with telegraph or telephone circuits connected with company offices; and in railroad telegraph offices. The purpose of the functional office is not to originate messages (though there is frequently no telegraphic handling of messages before they reach a functional office), but rather to transmit messages received from the various tributary sources. Local offices may trans-

mit local messages without routing them through functional offices, but their main purpose is the securing or originating of business; they act as intermediaries between the public and the operating or transmitting personnel in functional offices.

Messages originating outside of functional offices are transmitted to them in various ways: By local telegraph circuits (formerly Morse, now usually printer); by pneumatic tubes (from nearby branch offices where the traffic is heavy); by messenger; and by telephone.

It is readily seen that in small offices, serving mainly as originators of business, the productivity of operators will vary indefinitely with several factors in addition to the mode of operation (Morse *v.* printer). Productivity, in terms of messages handled by telegraph, will depend especially on the number of messages received for transmission. Whether business is brisk or slow, someone must be on duty to serve such customers as may call for service. If an operator in a small office is expected to attend to office routine or to solicit business, his productivity as an operator, in terms of number of messages handled, will be proportionately low.

In functional offices, on the other hand, there is a specialization of work which limits operators to the actual work of transmitting messages. Furthermore, there is ordinarily a sufficient volume of business to enable the management to reduce or to increase the number of operators in accordance with fluctuations in the volume of traffic. The productivity of operators and the effects of technological changes on number of operators can therefore be measured in functional offices much more adequately than in other offices.

Whenever the basic facts concerning units of output and units of labor are available, it is desirable to estimate the technological displacement of labor by means of a comparison of changes in number of labor units on the one hand and in number of output units on the other hand. In the case of commercial message handling by the telegraph companies, this method, even in the case of functional offices, fails to give adequate results, because of lack of comparable data.

The principal unit of output of the telegraph industry is the message. But messages vary indefinitely in length and in the proportionate numbers of longer and shorter kinds of messages. New kinds of messages have been introduced from time to time, as night letters, night messages, day letters, etc., and the relative numbers and average lengths of the various types interpose difficulties in the way of reducing them to a common denominator. Furthermore, as far as actual transmission over the wire is concerned, some messages are handled only once, while others are handled several times. A message originating (for example) at the local office of the company in Alexandria, Va., and directed to someone at the Waldorf-Astoria Hotel in New York is handled six times: (1) Transmitted by the Alexandria operator; (2) received and (3) transmitted by the functional office operators in Washington, D. C.; (4) received and (5) transmitted by the functional office operators in New York City; and (6) received by the branch-office operator at the hotel, for delivery to the addressee.

The number of handlings, as well as the average length, of messages is not continuously comparable over a period of years. This is due to the fact that the facilities afforded by circuits, by repeater stations

(formerly manual, now automatic), and by intermediate and terminal offices are constantly undergoing changes. These changes frequently result in economies in the routing of messages and reduction of the number of handlings.

The principal telegraph companies are now "equating" their messages. An equated message consists of an arbitrary number of impulses sent over the wire by the operator. Two short messages of 20 words each would make approximately one and one-half equated messages. One longer message of 55 words would make approximately two equated messages.

By noting changes in the number of equated message handlings, it is possible to measure the fluctuations in the volume of traffic and the efficiency of operating plant and personnel. Equated message handlings are not a true measure of output. They are partly a measure of operating efficiency, especially in the economical routing and transmission of the output. The ultimate unit of output is the character (letter or figure or space) sent by the operator over the wire. The word "wire," for instance, if included in a telegram, would require the sending of five separate characters—each of the four letters in the word and a space impulse for separating it from the word which follows. But the use of such a unit for general statistical purposes in correlation with units of labor is impossible for the obvious reason that there are no records of the number of character impulses transmitted.

Turning now to the problem of units of labor, we find that for the entire industry there are no satisfactory records covering the period of transition to the printer telegraph. Even for functional offices the number of man-hours is not available in suitable form, nor indeed in any form except for certain offices. For a majority of functional offices, the total number of operators is available for the entire period of rapid transition, but inferences drawn from the use of the data would be decidedly inadequate.

A complete statistical picture of the productivity of labor in terms of a comparison of changes in units of labor and units of output can not be drawn because of the incompleteness of the basic data now available. But fortunately there is an alternative mode of approach—a method based on the comparative efficiency of Morse manual, multiplex, and simplex operation. This method is applicable only to functional offices, but in these offices it reveals approximately the technological displacement of operators normally to be expected on the basis of technological improvements already is use.

The efficiency of an operator as measured by the amount of traffic handled depends in part on the speed at which he sends or receives characters (letters, figures, etc.) over the wire while he is actually at work, and in part on the proportion of his time that is devoted to sending or receiving impulses over the wire. Quantity of output depends, that is to say, on either increasing the speed or reducing the idle time, or both. The printer telegraph outrivals the Morse manual method in both of these essential factors of productivity.

The printer telegraph is geared at an automatically maintained speed. The gearing is adjustable; the usual speed is 60 equated words a minute, but on good multiplex circuits it is often higher. An equated word consists of an arbitrary but supposedly average number of letters or characters. The machine is geared to send impulses over

the wire at a fixed rate, and this rate, per minute, equals the number of characters, including spaces, contained in 60 words of average length.

The speed of the Morse operator varies indefinitely. In commercial telegraph offices it ranges around 25 words a minute.[2] At the receiving end there must also be an operator, concentrating on the message, and transcribing it as it is ticked off by the "sounder." The speed, of course, is fixed by the capacity of the slower of the two operators.

In the case of the printer telegraph, the operator (typist) must keep pace with the automatically geared machine, and if she is unable to do so, she merely gives place to another. But her ability to maintain such a speed is facilitated by the fact that she can alternate in the work of sending and receiving. Reception relieves the tension of rapid, monotonous pounding of a geared keyboard, because it consists merely of taking the automatically typed message from the machine and preparing it for the belt conveyor or in other ways facilitating its ultimate delivery. The pasting of the printed tape to message blanks may be monotonous, but at least it affords a change.

There is necessarily much loss of time in both Morse and printer operation, and only during peak-load periods do the potential speeds find full expression in actual messages handled. But the loss of time from actual transmission or reception is likely to be greater by Morse than by printer operators. If either the sending or the receiving Morse operator is interrupted both will remain idle; while reception by printer is automatic. Transmission by perforated tape (the usual method on multiplex circuits) makes possible the accumulation of a reserve of typed copy (in the form of perforations on the tape), and if the operator (typist) is interrupted, the tape transmission continues automatically at the speed fixed by the gearing.

A number of other factors tend to reduce the idle time of printer operators as compared with Morse operators. The most important of these is probably the wire-concentration unit or concentrator. This is a device not yet perfected but nevertheless in extensive use in functional offices, for handling, by simplex operators, the business that originates or terminates in branch offices and customers' offices equipped with simplex printers. By an automatic signal system, idle operators are chosen in such a sequence as to keep a minimum number of operators busy. If business falls off, some of the operators are automatically rendered idle and are transferred to a reserve force or to another wire-concentration unit where traffic is increasing. In one of these units, a 200-wire concentrator, to cite an example, 200 circuits from customers' offices or branch offices are handled by 29 simplex printers, manned by a varying number of operators. There are several advantages—a reduction of the number of printers; a saving of floor space; a speeding up of service; and finally, elasticity in the number of operators. Adjustment of the number of operators to the volume of traffic means that there is relatively little idle time and therefore a relatively high productivity as measured by message handlings. In the case of multiplex operators, this automatic adjustment is not so essential, for multiplex operators handle trunk-line traffic

[2] For a discussion of the subject, see the article on the telegraph by Newcomb Carlton in the new edition of the Encyclopedia Britannica.

and there is usually on the trunk lines a volume of business large enough to make relatively simple the adjustment of the operating staff to traffic requirements.

The effects of these various factors appear in Table 3, which is based on the comparative productivity of the three types of operation (Morse manual, multiplex, and simplex).

TABLE 3.—EFFECTS OF INTRODUCTION OF PRINTER TELEGRAPH ON EMPLOYMENT OPPORTUNITIES FOR OPERATORS

[Estimated on basis of comparative productivity of different types of operators in a majority of functional offices in 1931]

Types of operation	Operators		Per cent of business handled	Relative productivity (Morse manual=100)	Number of Morse manual operators necessary to handle 99 per cent of business	Loss of employment opportunities for operators	
	Number	Per cent of total				Estimated number	Per cent
Morse manual	1,792	21.2	10.5	100	1,792	----------	----------
Multiplex	4,177	49.4	62.3	255	10,651	6,474	60.8
Simplex	2,491	29.4	26.2	180	4,483	1,992	44.4
Total	8,460	100.0	[1] 99.0	----------	16,926	8,466	50.0

[1] 1 per cent of the business was handled by telephone.

From Table 3 it appears that the productivity of Morse operators in comparison with multiplex operators is in the ratio of 100 to 255; and of Morse to simplex operators, in the ratio of 100 to 180. The number of Morse operators necessary for handling the total functional-office traffic would be about twice the total number of operators in service in 1931. The technological displacement (loss of employment opportunities) was therefore about 50 per cent.

The conclusions embodied in Table 3 are subject to certain qualifications.

In the first place, the figures do not include the functional offices of companies which have most recently introduced simplex printers. But the functional offices included in the table employ about 75 per cent of all functional-office operators, and handle a larger per cent of functional-office traffic. It is probable that the working out of the new system in all functional offices means not less than 10,000 fewer employment opportunities than would be available under complete Morse operation, in the functional offices only of the commercial telegraph companies.

In the second place, the per cent of technological displacement may be expected to rise as the proportion of traffic handled by printer operators increases, and as the number of simplex operators becomes more readily adaptable to changes in the volume of traffic. Increasing elasticity of the labor force may be expected to result from the progressive solution of the problems of transition to the new system, and especially from the perfecting of the wire concentration unit previously described.

A possible criticism of Table 3 is the fact that Morse operators of to-day have specialized work to do. If they handled the entire traffic to-day, would their efficiency in terms of average output per operator be comparable to what it actually is with specialized work rather than general traffic?

This question raises in turn another: What was the efficiency of Morse operators in terms of average output per operator before the introduction of the printer, when they handled the entire traffic? Fortunately, records are available of the number of operators on duty and the number of messages actually sent and received in 22 principal cities during April of the years 1907 and 1908. These records show that the average number of messages sent and received per day per operator in 1907 was 132.8 (16.6 per hour on an 8-hour basis); and the number in April, 1908, was 140.3 (17.5 per hour on an 8-hour basis).[3]

These hourly rates afford a significant contrast with the record of Morse operators at the present time in similar offices. During August, 1931 (a period of depression adverse to high productivity), Morse operators in a majority of functional offices handled an average of 24.3 equated messages per hour. It is possible that the equated message of August, 1931, was shorter than the average unequated message of April, 1907 and 1908, but that there was any considerable difference is quite unlikely.

The excellent average showing made by Morse operators of to-day, in functional offices, in comparison with those of the era before the printer, is due largely to the fact that present-day Morse operators have high-grade circuits for use in handling specialized work requiring speed and flexibility, such as certain market quotations, brokerage work, and sporting news. Old Morse operators are sometimes heard to boast of the large number of messages they handled in the heyday of Morse telegraphy. The number of messages which telegraphers were inclined to regard as a fair day's work was about 250. But under the stimulus of the bonus system, experts were able, on good circuits and under favorable conditions, to handle an average of 60 messages an hour. On the other hand, the speeding up not infrequently resulted in breakdowns, or in the partial paralysis known as "glass arm." Partly attributable to excessive speed, no doubt, were also the traditional restlessness and roving disposition of Morse telegraphers. Their output, attributed to themselves in reminiscent moods, is undoubtedly exceptional rather than characteristic.

On June 30, 1931, the total number of operators in functional telegraph offices was 11,524; and in other company offices, 5,533; total, 17,057.

If all of the operators in offices not classed as functional had been Morse operators, how many operators would have been required? As has already been stated,[4] the conditions prevailing in these offices, which are primarily feeders for the functional offices, prevent a full utilization of the possibilities of the printer telegraph for increasing the output of operators. When there are no messages to be handled, the greater speed of the printer is of no avail. The operating staff (often limited to a single operator) may be utilized for office routine and for soliciting business. The printer, by expediting the handling of such messages as are filed, may increase the productivity of the operator by making possible more time for duties other than message handling; and in offices where the volume of traffic is relatively large, printer operation reduces the number of operators or makes unnecessary an expansion which would have been required under Morse

[3] Based on data in S. Doc. 725 (60th Cong., 2d sess.): Investigation of the Western Union and Postal Telegraph-Cable Cos., pp. 68, 282, 283.

[4] See pp. 506,507.

operation. Statistical measurement is impossible, but in comparison with the effects in functional offices, increased productivity and technological displacement in the nonfunctional offices are small.

Technological Displacement in Relation to Skill, Training, and Sex

THE effects of change to printer operation are by no means limited to a reduction of the number of operators otherwise necessary. Technological displacement includes, in this case, not only a decline in number of opportunities for employment but other changes of considerable social importance: (1) The passing of a historic type or class (the Morse telegrapher); (2) the elimination of a long-established technique requiring highly specialized skill and training; and (3) the supplanting of men by women.

Table 4 indicates the displacement of Morse operators since 1915 in those offices for which classified figures are available.

TABLE 4.—DISPLACEMENT OF MORSE OPERATORS BY PRINTER OPERATORS, IN A MAJORITY OF TELEGRAPH OFFICES, 1915 TO 1931

Year	Functional offices				Other company offices				Total			
	Morse operators		Printer operators		Morse operators		Printer operators		Morse operators		Printer operators	
	Average number	Per cent	Average number	Per cent	Average number	Per cent	Average number	Per cent	Average number	Per cent	Average number	Per cent
1915	4,815	79.6	1,231	20.4								
1921	4,275	46.3	4,949	53.7								
1925	4,259	49.3	4,374	50.7	[1] 2,972	98.2	[1] 53	1.8	7,231	63.1	4,227	36.9
1929	3,019	31.8	6,478	68.2	1,417	37.1	2,402	62.9	4,436	33.3	8,880	66.7
1931	1,793	21.2	6,670	78.8	[2]		[2] 3,125	100.0	1,793	15.5	9,795	84.5

[1] Average number, first quarter of 1926.
[2] The number of Morse operators is now negligible and no separate classification is maintained.

The transition may be said to have begun about a decade and a half ago. Although 20.4 per cent of operators in the functional offices included in Table 4 were already printer operators in 1915, most of the printer telegraphs then in use had been recently installed. Until the perfecting of the simplex printer after 1925, the number of Morse operators, even in functional offices equipped with multiplex printers, remained almost 50 per cent of the total number; while up to that date printer operators were confined to functional offices. The transition to printer operation in functional offices was so gradual as to create no very serious problem of displacement. But after 1925, the decline of Morse telegraphy was so rapid that, in the offices included in the table, Morse telegraphers declined in number from 7,231 to 1,793 and in proportion from 63.1 to 15.5 per cent.

For the offices not included in Table 4, information relating to earlier years is not available. In general, these offices adopted the printer system later, and indeed, in 1931, were still undergoing transition, in consequence of which the number of operators was abnormally large.

At the end of June, 1931, in all of the commercial telegraph offices of the major companies, there were 3,678 Morse manual operators, or 21.5 per cent of the total; 5,127 multiplex printer operators, 30.1 per cent; and 8,249 simplex printer operators, 48.4 per cent.

Many of the Morse operators now in service may be retained till natural turnover (resignation, retirement, or death) removes them. But the virtual abandonment of the Morse system, not only in commercial telegraph offices but also in most of the other fields in which it has long been used, is nearly everywhere taken for granted.

While Morse telegraphers have been confronting a rapid decline in the demand for their services in commercial telegraph offices, they have also encountered a decrease of opportunities for transfer to related fields (as railroad telegraphy). At the same time, they have met several obstacles in the way of their becoming operators of printer telegraphs. The principal obstacle has been the rivalry of young girls expertly trained in the handling of the typewriter; for the printer telegraph, as has been explained, is a typewriter adapted to the setting up of the electrical contacts required for the transmission of characters over the telegraphic circuit. Younger Morse operators, especially girls, found no difficulty in shifting from the Morse to the printer system. But many found the change impossible and many others were perhaps not unnaturally hindered by reluctance to exchange a higher for a lower status.

A survey by the Bureau of the Census in 1902 recorded a total of 13,093 telegraph operators connected with commercial telegraph systems. Of these, only 2,914, or 22.3 per cent, were females. The average wage of female operators was 36.3 per cent less than the average wage of male operators.[5]

The first distinctive trend toward the substitution of women for men seems to have been a result of the disturbed conditions of 1907 and 1908. Industrial depression, strikes, and the automatic telegraph combined to reduce the total number of operators, and to increase materially the comparative number of female operators in these offices.

TABLE 5.—PROPORTION OF MALE AND FEMALE TELEGRAPH OPERATORS IN COMMERCIAL TELEGRAPH OFFICES OF 26 PRINCIPAL CITIES, 1907 AND 1908[1]

Year	Males		Females		Total			
					Males		Females	
	Morse manual	Machine	Morse manual	Machine	Number	Per cent	Number	Per cent
1907	4,144	21	859	52	4,165	82.1	911	17.9
1908	2,927	32	884	117	2,959	74.7	1,001	25.3

[1] Based on data in S. Doc. 725 (60th Cong., 2d sess.): Investigation of Western Union and Postal Telegraph-Cable Cos., pp. 282, 283.

Table 5, although based on limited data, indicates the trend toward female operators. The per cent in 1907 was only 17.9, while in 1908 it was 25.3.

For a majority of functional offices, the trend toward the substitution of women for men is shown in Table 6.

[5] U. S. Bureau of the Census. Telephones and telegraphs, 1902, p. 102.

TABLE 6.—SHIFT FROM MALE TO FEMALE TELEGRAPH OPERATORS IN A MAJORITY OF FUNCTIONAL TELEGRAPH OFFICES, 1915 TO 1931

Year	Morse manual operators					Operators of printer equipment					Total				
	Male		Female		Total	Male		Female		Total	Male		Female		Total
	Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent	
1915	4,189	87	626	13	4,815	317	26	914	74	1,231	4,506	75	1,540	25	6,046
1921	3,310	77	965	23	4,275	630	13	4,319	87	4,949	3,940	43	5,284	57	9,224
1925	3,441	81	818	19	4,259	756	17	3,618	83	4,374	4,197	49	4,436	51	8,633
1929	2,426	80	593	20	3,019	1,113	17	5,365	83	6,478	3,539	37	5,958	63	9,497
1931	1,485	83	308	17	1,793	1,524	23	5,146	77	6,670	3,009	36	5,454	64	8,463

It will be seen from Table 6 that there has been a slight decline in the proportion of males, even among Morse operators. The per cent of male Morse operators in 1915 was 87; in 1931, 83. The recent increase in the proportion of male printer operators from 17 per cent of the total in 1929 to 23 per cent in 1931 is probably due to the general installation of simplex printers, combined with the feeling on the part of Morse operators that transfer to printer positions is necessary in order to avoid unemployment. The total displacement of men by women in these offices since 1915 is shown under the last heading above as a decline from 75 per cent in 1915 to 36 per cent in 1931.

In regard to those functional offices which have most recently changed to printer operation, and in regard to all offices not classed as functional, there are no available records covering the earlier years of transition to the new system. But for 1931, Table 7 exhibits the comparative numbers of male and female operators, by classes, in all offices of the principal commercial telegraph companies.

TABLE 7.—RELATIVE NUMBERS OF MALE AND FEMALE TELEGRAPH OPERATORS IN ALL OFFICES OF PRINCIPAL COMMERCIAL TELEGRAPH COMPANIES, 1931

Class	Male operators		Female operators		Total	
	Average number	Per cent	Average number	Per cent	Average number	Per cent
Morse manual operators	3,087	83.9	591	16.1	3,678	21.5
Multiplex printer operators	841	16.4	4,286	83.6	5,127	30.1
Simplex printer operators	2,756	33.4	5,493	66.6	8,249	48.4
Total	6,684	39.2	10,370	60.8	17,054	100.0

Among Morse operators, men still predominate, numbering 3,087 in 1931, or 83.9 per cent. The proportion of Morse operators (21.5 per cent of the total in 1931) is probably destined to a further decline. In many offices, the transition to printer was still under way in 1931. Among multiplex operators (a total of 5,127, forming 30.1 per cent of all operators in the offices of the principal companies) women predominated in virtually the same ratio as did men among Morse operators (4,286, or 83.6 per cent). The number of simplex operators was 8,249, or 48.4 per cent of the total. Of these, almost exactly a third (2,756) were men. The relatively rapid change from the

Morse system to the simplex printer on local circuits created, for the Morse operators who had handled these circuits, a grave problem aggravated by industrial depression and the decline of Morse telegraphy in other fields, especially on railroads.

In attempting to meet the problem of the displacement of skilled Morse operators, a leading telegraph company has facilitated transfers to printer positions by maintaining temporary training schools. The company's policy is officially described as follows:

> All Morse employees having any aptitude were given an opportunity to become testing and regulating attendants, for which job a knowledge of Morse is essential. Other Morse operators were given an opportunity to learn the simplex method of operation. In both instances the instruction in the new duties was given on company's time. As a rule, Morse operators do not make as good simplex operators as do younger people directly trained for that service. Nevertheless, such Morse operators are retained at their old ratings even though younger and better employees could be secured at the lower rating prevalent for simplex operators.

At the end of July, 1931, the results of the company's policy were indicated by the fact that in the case of simplex operators in functional offices, more than half of the male operators (58.8 per cent) and a considerable proportion of female operators (17.3 per cent) had been Morse telegraphers. Of the total number of simplex operators in functional offices (2,491), 31.2 per cent had been Morse operators.

In addition to the printer telegraphs in company offices, there are many thousands of instruments in customers' offices, connected by their own leased-wire circuits with the offices of the telegraph companies. There are also thousands of instruments in the offices of large organizations, using leased-wire circuits not connected directly with telegraph company offices but forming a part of the wire system of the telephone companies. A recent innovation enables those who have printer telegraphs to communicate directly with each other without having their messages transmitted for them by operators in the offices of the telegraph companies. In principle, the new method is similar to that of the telephone. A telephone company, instead of transmitting a telephone message, merely furnishes facilities by which any two subscribers transmit their own messages—that is, carry on a conversation. Similarly, the new telegraph system enables subscribers to do their own telegraphing.

The new arrangements were made effective late in 1931 by the telegraph companies for customers having printer circuits connected with their offices, and by the telephone companies for their patrons with leased-wire printer circuits. There are two methods. One is an automatic tape-perforating device for transferring customers' messages from one circuit to another. The other method is a switchboard resembling in function the telephone switchboard. That is, its function is to establish a circuit between any two subscribers, so that they may communicate directly with each other simply by the typing of messages on the teletypes in their own offices.

Remarkable and rapid as have been the recent changes in employment conditions in the communications industries, there seems little hazard in prophesying further important changes in the numbers and status of commercial telegraphers.

Fluctuation of Employment in Ohio in 1930, and Comparisons With Previous Years

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FLUCTUATION of employment during 1930 of wage earners, clerical employees, and salespeople (not traveling) is shown for 44,307 establishments in Ohio in this report. Comparison is also made with the previous six years. A report[1] of the United States Bureau of Labor Statistics which is now in press will make available data for the period from January, 1914.

The month of highest employment in 1930 as reported by the 44,307 establishments in manufactures, service, wholesale and retail trade, transportation and public utilities, construction, mining and quarrying, agriculture, and fisheries was May, when a total of 1,225,478 persons was reported. The month of lowest employment as reported by these establishments was December, when a total of 1,066,310 was reported. The variation from the high point of employment for both sexes combined was 159,168, or 13 per cent.

The difference between employees reported for 1930 and 1929 affords some approximation of the effect of the depression. Reports for 1930 were secured from 1,126, or 2.6 per cent, more establishments than in 1929. Practically all of these additional establishments were probably small concerns and even with employment conditions unchanged the increase in number of persons employed would not be in proportion to the increase in number of establishments. As a matter of fact, even with the increase from 43,181 to 44,307 in number of establishments reporting, the maximum number of persons employed dropped from 1,356,004 to 1,225,478, the minimum number dropped from 1,230,724 to 1,066,310, and the average number from 1,306,622 to 1,161,860. This was a decrease of 130,526, or 9.6 per cent, in the maximum, a decrease of 164,414, or 13.4 per cent in the minimum, and a decrease of 144,762, or 11.1 per cent, in the average number of persons reported employed.

Males reported employed in 1930 by 44,307 establishments compared with 43,181 establishments in 1929, show a decrease of 115,343, or 10.9 per cent, in the maximum number, a decrease of 132,065, or 14.3 per cent, in the minimum number, and 122,211, or 12.2 per cent in the average number. Females reported employed in 44,307 establishments in 1930 compared with 43,181 establishments in 1929, show a decrease of 24,938, or 8 per cent, in the maximum number, a decrease of 16,003 or 5.6 per cent, in the minimum number, and a decrease of 22,551, or 7.5 per cent, in the average number.

The total wage and salary payments (including superintendents and managers) reported by the 44,307 establishments in 1930 compared with the reports from 43,181 establishments in 1929 show a decrease of $320,017,175, or 15.5 per cent.

Sources and Scope of Study

THE reports for the several years have been compiled from two series of reports collected and tabulated by the Division of Labor Statistics of the Department of Industrial Relations of Ohio. One of the two

[1] U. S. Bureau of Labor Statistics, Bul. No. 553: Fluctuation in Employment in Ohio, 1914 to 1929.

series gives statistics of mines and quarries and the other statistics of all other industries in the State except interstate transportation and governmental employment.

The statistical data for these reports were furnished annually by employers of the State as required by law. The reports as compiled by the Ohio Division of Labor Statistics show the data by industries for the State as a whole and also for each of the more populous counties.

It is believed that this detailed information affords the most comprehensive and detailed data available in this country relating to changing employment or so-called fluctuation of employment for a long series of years. In each of the years the establishments are identical throughout the year and the facilities for securing reports from all establishments, as explained in a previous report,[2] are unusually favorable. The number of establishments reporting has increased each year but the added establishments are generally those employing comparatively few persons.

The industries covered and the number of establishments reporting are shown in Table 1. The number of establishments reporting increased in 1930 over 1929 a total of 1,126. The principal increases were 906 in service and 498 in trade. In construction there was a decrease of 511.

TABLE 1.—NUMBER OF OHIO ESTABLISHMENTS REPORTING FLUCTUATION OF EMPLOYMENT, 1924 TO 1930

Industry group	Number of establishments reporting each year						
	1924	1925	1926	1927	1928	1929	1930
Agriculture	732	910	1,052	1,199	1,329	1,444	1,639
Construction	7,364	8,407	9,145	9,724	9,942	10,183	9,672
Fisheries	25	23	22	21	20	21	22
Manufactures	9,125	9,502	9,704	9,880	9,937	10,035	10,011
Mining and quarrying:							
Coal mining	1,000	889	879	858	714	679	674
Fire-clay mining	108	108	110	105	112	108	107
Gypsum mining	3	3	3	3	3	3	3
Limestone quarrying	116	119	119	114	122	121	123
Sandstone quarrying	49	43	44	46	42	33	30
Service	4,233	[1] 5,971	6,761	7,598	8,210	9,335	10,241
Trade, wholesale and retail	7,689	[1] 7,277	7,867	8,526	8,916	9,524	10,022
Transportation and public utilities	1,271	1,353	1,453	1,561	1,625	1,674	1,741
Industry, not otherwise classified	25	23	22	21	20	21	22
Total	31,740	34,628	37,181	39,656	40,992	43,181	44,307

[1] A considerable part of the increase in number of establishments in service and of the decrease in trade, as compared with the previous year, is due to change of classification of "offices" from trade to service. This change of course also affects the number of employees.

The returns received do not give a complete picture for the industry group "agriculture" and for the subgroup "domestic service" under the industry group "service," as comparatively few farms or domestic establishments in Ohio employ as many as three persons and reports are not sought, although a few are received, from concerns employing fewer than three workers. The lists of the division of labor statistics are carefully checked with those of the industrial commission, which administers the workmen's compensation law. Employers of fewer

[2] Labor Review, April, 1930, pp. 31–62. Also see U. S. Bureau of Labor Statistics Bul. No. 553: Fluctuation in Employment in Ohio, 1914 to 1929.

than three workers may carry insurance but are not compelled to do so. Household or domestic service does not come within the requirements of the insurance law but employers of such service, regardless of the number of persons employed, may avail themselves of the provisions of that law. The Monthly Labor Review for April, 1930 (p. 33), contains a discussion relative to the approximate completeness of the materials collected for the Ohio statistical reports.

For each of the seven years, 1924 to 1930, Table 2 shows the maximum, minimum, and average number of employees for whom information was secured.

TABLE 2.—NUMBER OF EMPLOYEES COVERED BY REPORTS TO THE DIVISION OF LABOR STATISTICS, DEPARTMENT OF INDUSTRIAL RELATIONS OF OHIO, 1924 TO 1930

Item	1924	1925	1926	1927	1928	1929	1930
Males							
Maximum month	891,731	945,843	990,383	953,784	993,705	1,054,154	938,811
Minimum month	833,115	847,398	898,011	869,457	843,462	921,442	789,377
Average of 12 monthly reports	857,062	907,167	946,740	921,753	939,567	1,004,283	882,072
Females							
Maximum month	248,713	266,861	279,275	284,664	301,222	313,416	288,478
Minimum month	230,147	239,065	253,728	260,958	261,946	287,221	271,218
Average of 12 monthly reports	238,426	250,612	264,106	272,395	278,974	302,339	279,788
Both sexes							
Maximum month	1,134,424	1,206,246	1,259,325	1,225,049	1,282,584	1,356,004	1,225,478
Minimum month	1,063,262	1,086,463	1,151,739	1,152,874	1,105,408	1,230,724	1,066,310
Average of 12 monthly reports	1,095,488	1,157,779	1,210,846	1,194,148	1,218,541	1,306,622	1,161,860

The amount reported paid in wages and salaries in 1930 by 44,307 establishments and in 1929 by 43,181 establishments is shown in Table 3. The decrease in amount paid, even with the increase in number of establishments reporting, was $320,017,175, or 15.5 per cent. The clerical group (bookkeepers, stenographers, and office clerks) shows an increase in amount paid of $9,611,892, or 3.4 per cent, which is probably due to the fact that the increase in establishments, as noted on a previous page, occurred very largely in the two industry groups, service and trade, with percentages of increase of 9.7 and 5.2 per cent, respectively. Information concerning superintendents and managers is not included in other tables of this report.

TABLE 3.—WAGE AND SALARY PAYMENTS IN OHIO ESTABLISHMENTS, 1929 AND 1930, BY GENERAL OCCUPATION GROUPS

General occupation group	1929 (43,181 establishments)	1930 (44,307 establishments)
Wage earners	$1,523,848,976	$1,220,699,988
Bookkeepers, stenographers, and office clerks	282,709,980	292,321,872
Sales people (not traveling)	119,084,364	88,972,655
Superintendents and managers	134,705,187	138,336,817
Total	2,060,348,507	1,740,331,332

Fluctuation of Employment, by Industries

TABLE 4 shows for each industry group the number of persons reported employed on the 15th of each month of 1930. As before stated, the figures for agriculture do not give a complete picture of that industry.

TABLE 4.—NUMBER EMPLOYED IN OHIO ESTABLISHMENTS ON THE 15TH OF EACH MONTH IN 1930, BY SEX AND INDUSTRY GROUP

Sex and month	All industries	Agriculture	Construction	Fisheries	Manufactures	Mining and quarrying	Service	Trade, wholesale and retail	Transportation and public utilities	Industries not otherwise classified
Males										
January	894,063	6,132	52,953	212	573,651	27,900	84,970	84,775	63,454	16
February	895,346	6,196	52,797	214	576,043	27,996	85,093	84,373	62,618	16
March	902,083	7,209	57,695	304	574,979	27,779	86,588	85,026	62,487	16
April	932,039	8,337	69,584	318	585,431	27,615	90,178	86,313	64,246	17
May	938,811	8,975	78,723	386	580,380	27,115	91,072	86,177	65,965	18
June	922,061	9,048	79,754	352	561,721	27,236	91,542	86,026	66,364	18
July	897,592	9,876	82,068	281	536,915	27,014	89,861	84,617	66,943	17
August	879,302	8,613	79,513	287	523,644	27,503	89,188	83,660	66,877	17
September	868,427	8,756	75,250	320	516,187	28,169	89,355	84,049	66,324	17
October	850,779	8,769	70,411	329	505,481	29,208	87,280	84,505	64,778	18
November	814,983	7,284	59,948	325	486,934	28,874	85,560	84,076	61,963	19
December	789,377	6,358	47,724	212	478,273	28,307	83,405	85,697	59,382	19
Females										
January	281,826	814	2,385	.....	135,242	121	66,701	55,586	20,965	12
February	282,857	847	2,377	.....	136,514	121	66,827	55,312	20,847	12
March	285,270	954	2,408	.....	136,897	121	67,373	56,810	20,695	12
April	288,478	1,147	2,453	.....	136,507	121	68,086	59,680	20,470	14
May	286,667	1,207	2,480	.....	135,557	121	68,845	57,677	20,765	15
June	284,848	1,197	2,485	.....	134,117	121	69,000	57,062	20,853	13
July	274,200	1,242	2,443	.....	128,084	121	67,518	54,182	20,597	13
August	272,682	1,002	2,424	.....	128,874	121	66,8[illegible]	53,184	20,254	13
September	277,224	1,093	2,389	.....	131,696	121	67,290	55,102	19,519	14
October	275,259	1,072	2,386	.....	129,160	121	66,641	56,560	19,305	14
November	271,218	892	2,342	.....	124,442	121	65,716	58,689	19,003	13
December	276,933	843	2,297	.....	121,406	121	65,242	68,288	18,725	11
Both sexes										
January	1,175,889	6,946	55,338	212	708,893	28,021	151,671	140,361	84,419	28
February	1,178,203	7,043	55,174	214	712,557	28,117	151,920	139,685	83,465	28
March	1,187,353	8,163	60,103	304	711,876	27,900	153,961	141,836	83,182	28
April	1,220,517	9,484	72,037	318	721,938	27,736	158,264	145,993	84,716	31
May	1,225,478	10,182	81,203	386	715,937	27,236	159,917	143,854	86,730	33
June	1,206,909	10,245	82,239	352	695,838	27,357	160,542	143,088	87,217	31
July	1,171,792	11,118	84,511	281	664,999	27,135	157,379	138,799	87,540	30
August	1,151,984	9,615	81,937	287	652,518	27,624	155,998	136,844	87,131	30
September	1,145,651	9,849	77,639	320	647,883	28,290	156,645	139,151	85,843	31
October	1,126,038	9,841	72,797	329	634,641	29,329	153,921	141,065	84,083	32
November	1,086,201	8,176	62,290	325	611,376	28,995	151,276	142,765	80,966	32
December	1,066,310	7,201	50,021	212	599,679	28,428	148,647	153,985	78,107	30

The month of maximum and the month of minimum employment and also the variation in number employed are shown for each industry group in Table 5.

In the industry groups numerically important, the greatest variation for both sexes combined occurred in construction with 40.8 per cent and the second greatest in manufactures with 16.9 per cent.

Charts 1 to 4 show in graphic form the course of employment of males and of females in all industries combined and in manufactures each year from 1914 to 1930. The line is broken at the end of each year as the number of establishments[3] is not the same from year to year. Within each year, however, the establishments are identical throughout the 12 months.

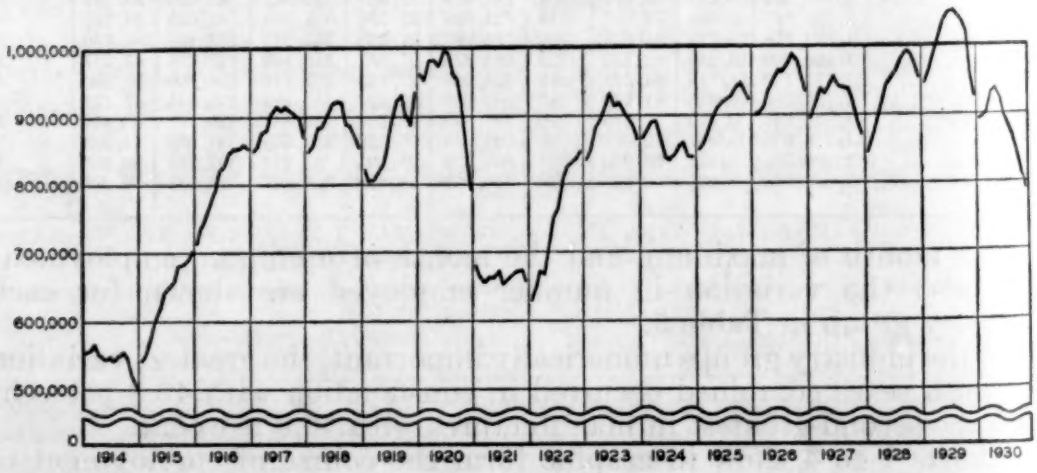
[3] For number of establishments in earlier years of the period, see U. S. Bureau of Labor Statistics Bul. No. 553: Fluctuation of Employment in Ohio, 1914 to 1929, Table 1.

TABLE 5.—MAXIMUM AND MINIMUM EMPLOYMENT IN 1930 IN EACH INDUSTRY GROUP IN OHIO, BY SEX

Sex and industry group	Maximum		Minimum		Variation from maximum	
	Number	Month	Number	Month	Number	Per cent
Males						
All industries	938,811	May	789,377	December	149,434	15.9
Agriculture	9,876	July	6,132	January	3,744	37.9
Construction	82,068	do	47,724	December	34,344	41.8
Fisheries	386	May	212	January, December	174	45.1
Manufactures	585,431	April	478,273	do	107,158	18.3
Mining and quarrying	29,208	October	27,014	July	2,194	7.5
Service	91,542	June	83,405	December	8,137	8.9
Trade, wholesale and retail	86,313	April	83,660	August	2,653	3.1
Transportation and public utilities	66,943	July	59,382	December	7,561	11.3
Females						
All industries	288,478	April	271,218	November	17,260	6.0
Agriculture	1,242	July	814	January	428	34.5
Construction	2,485	June	2,297	December	188	7.6
Fisheries						
Manufactures	136,897	March	121,406	December	15,491	11.3
Mining and quarrying	(1)	(1)	(1)	(1)	(1)	(1)
Service	69,000	June	65,242	December	3,758	5.4
Trade, wholesale and retail	68,288	December	53,184	August	15,104	22.1
Transportation and public utilities	20,965	January	18,725	December	2,240	10.7
Both sexes						
All industries	1,225,478	May	1,066,310	do	159,168	13.0
Agriculture	11,118	July	6,946	January	4,172	37.5
Construction	84,511	do	50,021	December	34,490	40.8
Fisheries	386	May	212	January, December	174	45.1
Manufactures	721,938	April	599,679	do	122,259	16.9
Mining and quarrying	29,329	October	27,135	July	2,194	7.5
Service	160,542	June	148,647	December	11,895	7.4
Trade, wholesale and retail	153,985	December	136,844	August	17,141	11.1
Transportation and public utilities	87,540	July	78,107	December	9,433	10.8

[1] All "office help" and fluctuation not reported.

CHART 1.—FLUCTUATION OF EMPLOYMENT OF MALES IN ALL INDUSTRIES IN OHIO, 1914–1930



Manufactures includes more than three-fifths of the males and approximately one-half of the females covered in this report. The percentage of males in the manufactures group was 64.8 in 1928, 65.1 in 1929, and 61.4 in 1930 and of females 50.4 in 1928, 50.5 in 1929, and 47.0 in 1930.

CHART 2.—FLUCTUATION OF EMPLOYMENT OF FEMALES IN ALL INDUSTRIES IN OHIO, 1914–1930

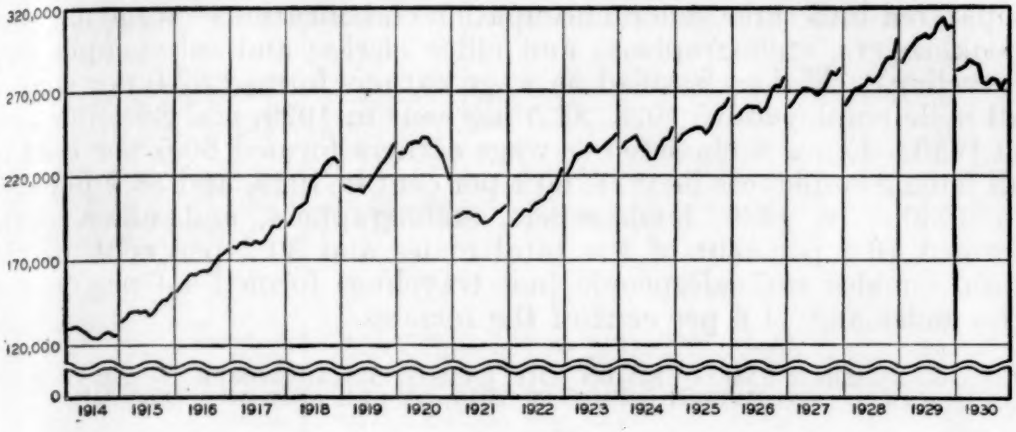


CHART 3.—FLUCTUATION OF EMPLOYMENT OF MALES IN MANUFACTURING INDUSTRIES IN OHIO, 1914–1930

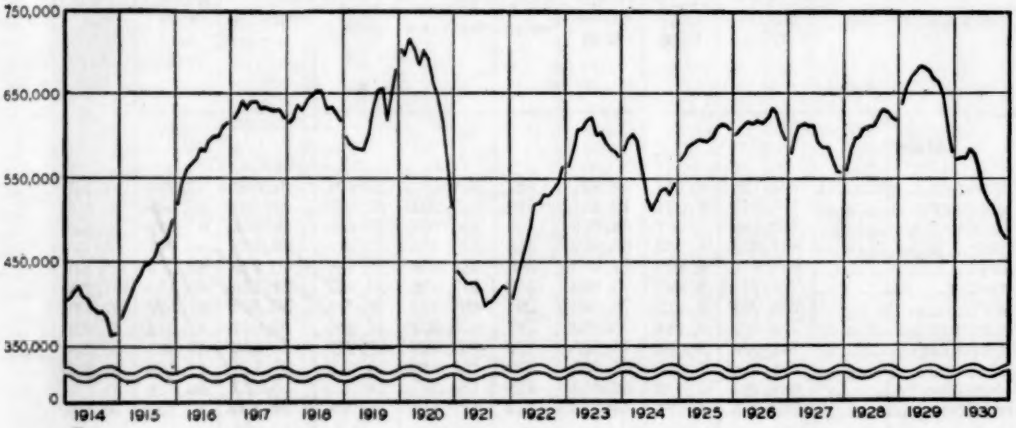
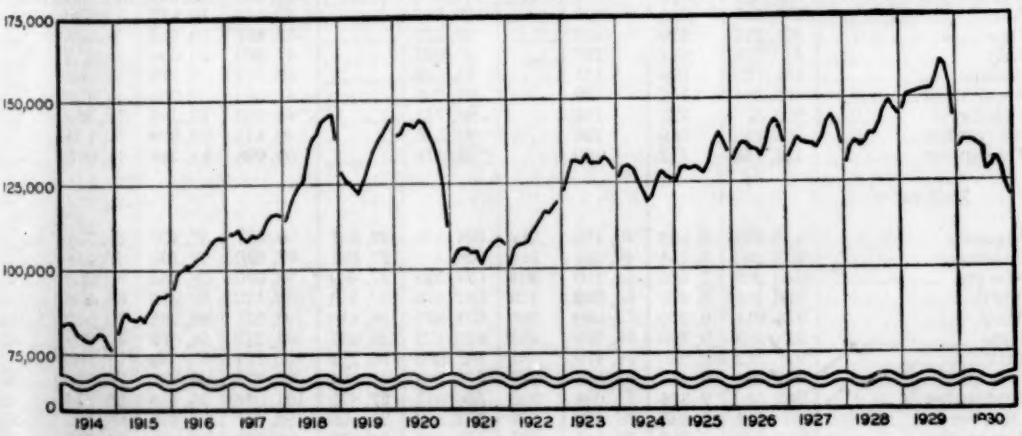


CHART 4.—FLUCTUATION OF EMPLOYMENT OF FEMALES IN MANUFACTURING INDUSTRIES IN OHIO, 1914–1930



Fluctuation of Employment, by General Occupation Groups

IN Table 6 the employees reported in each industry group are separated into three general occupation classifications—wage earners; bookkeepers, stenographers, and office clerks; and salespeople (not traveling). Males classified as wage earners formed 87.0 per cent of all male employees in 1928, 86.5 per cent in 1929, and 85.4 per cent in 1930. Females classified as wage earners formed 60.6 per cent of all female employees in 1928, 60.4 per cent in 1929, and 58.2 per cent in 1930. In 1930, bookkeepers, stenographers, and office clerks formed 10.2 per cent of the total males and 30.2 per cent of the total females and salespeople (not traveling) formed 4.4 per cent of the males and 11.6 per cent of the females.

TABLE 6.—NUMBER EMPLOYED ON THE 15TH OF EACH MONTH IN 1930 IN EACH GENERAL OCCUPATION GROUP IN OHIO, BY SEX AND INDUSTRY GROUP

Wage earners

Sex and month	All industries	Agriculture	Construction	Fisheries	Manufactures	Mining and quarrying	Service	Trade, wholesale and retail	Transportation and public utilities	Industries not otherwise classified
Males										
January	765,128	5,984	49,327	212	524,702	27,601	55,556	47,231	54,515	.....
February	766,557	6,051	49,151	214	527,203	27,697	55,525	47,048	53,668	.....
March	772,586	7,061	54,012	304	526,007	27,480	56,655	47,629	53,438	.....
April	801,631	8,162	65,872	318	536,328	27,316	60,158	48,301	55,176	.....
May	808,416	8,802	74,913	386	531,468	26,816	60,890	48,305	56,836	.....
June	791,772	8,887	75,896	352	512,936	26,937	61,425	48,135	57,204	.....
July	768,264	9,719	78,346	281	488,423	26,715	59,502	47,529	57,749	.....
August	751,192	8,464	75,752	287	475,737	27,204	59,021	47,012	57,715	.....
September	741,156	8,604	71,505	320	469,029	27,870	59,653	46,961	57,214	.....
October	723,220	8,610	66,756	329	457,848	28,909	57,774	47,169	55,825	.....
November	688,481	7,132	56,313	325	439,781	28,575	56,573	46,628	53,154	.....
December	662,335	6,204	44,213	212	431,416	28,008	54,530	47,158	50,594	.....
Females										
January	165,434	474	92	.....	99,797	.....	41,015	10,239	13,817	.....
February	166,698	483	83	.....	101,128	.....	41,105	10,133	13,766	.....
March	167,623	564	98	.....	101,522	.....	41,415	10,407	13,617	.....
April	168,570	715	110	.....	101,348	.....	41,968	10,969	13,460	.....
May	168,495	768	127	.....	100,363	.....	42,681	10,876	13,680	.....
June	167,213	819	133	.....	99,237	.....	42,817	10,542	13,665	.....
July	159,298	911	133	.....	93,627	.....	41,269	10,004	13,354	.....
August	158,772	679	135	.....	94,526	.....	40,752	9,719	12,961	.....
September	162,384	752	129	.....	97,786	.....	41,363	9,954	12,400	.....
October	160,331	723	144	.....	95,741	.....	41,063	10,310	12,350	.....
November	155,443	568	134	.....	91,545	.....	40,414	10,619	12,163	.....
December	152,454	517	120	.....	88,578	.....	39,998	11,266	11,975	.....
Both sexes										
January	930,562	6,458	49,419	212	624,499	27,601	96,571	57,470	68,332	.....
February	933,255	6,534	49,234	214	628,331	27,697	96,630	57,181	67,434	.....
March	940,209	7,625	54,110	304	627,529	27,480	98,070	58,036	67,055	.....
April	970,201	8,877	65,982	318	637,676	27,316	102,126	59,270	68,636	.....
May	976,911	9,570	75,040	386	631,831	26,816	103,571	59,181	70,516	.....
June	958,985	9,706	76,029	352	612,173	26,937	104,242	58,677	70,869	.....
July	927,562	10,630	78,479	281	582,050	26,715	100,771	57,533	71,103	.....
August	909,964	9,143	75,887	287	570,263	27,204	99,773	56,731	70,676	.....
September	903,540	9,356	71,634	320	566,815	27,870	101,016	56,915	69,614	.....
October	883,551	9,333	66,900	329	553,589	28,909	98,837	57,479	68,175	.....
November	843,924	7,700	56,447	325	531,326	28,575	96,987	57,247	65,317	.....
December	814,789	6,721	44,333	212	519,994	28,008	94,528	58,424	62,569	.....

TABLE 6.—NUMBER EMPLOYED ON THE 15TH OF EACH MONTH IN 1930 IN EACH GENERAL OCCUPATION GROUP IN OHIO, BY SEX AND INDUSTRY GROUP—Continued

Bookkeepers, stenographers, and office clerks

Sex and month	All industries	Agriculture	Construction	Fisheries	Manufactures	Mining and quarrying	Service	Trade, wholesale and retail	Transportation and public utilities	Industries not otherwise classified
Males										
January	90,678	101	3,045	.....	45,388	299	25,542	8,336	7,951	16
February	90,553	102	3,051	.....	45,259	299	25,549	8,320	7,957	16
March	90,912	104	3,065	.....	45,382	299	25,700	8,289	8,057	16
April	90,948	107	3,092	.....	45,484	299	25,637	8,253	8,059	17
May	90,929	107	3,179	.....	45,250	299	25,785	8,219	8,072	18
June	90,942	107	3,235	.....	45,129	299	25,810	8,263	8,081	18
July	90,723	105	3,094	.....	44,822	299	26,135	8,133	8,118	17
August	90,036	104	3,126	.....	44,240	299	26,059	8,113	8,078	17
September	88,869	102	3,087	.....	43,469	299	25,747	8,119	8,029	17
October	89,076	105	3,006	.....	43,984	299	25,679	8,099	7,886	18
November	88,070	101	2,986	.....	43,528	299	25,300	8,089	7,749	18
December	87,593	100	2,901	.....	43,223	299	25,284	8,041	7,727	18
Females										
January	86,206	302	2,258	.....	34,151	121	25,444	16,831	7,087	12
February	85,836	326	2,259	.....	34,083	121	25,466	16,546	7,023	12
March	86,158	353	2,272	.....	34,043	121	25,709	16,644	7,004	12
April	86,009	385	2,304	.....	33,824	121	25,832	16,600	6,929	14
May	86,000	391	2,314	.....	33,842	121	25,875	16,437	7,005	15
June	85,625	343	2,316	.....	33,524	121	25,865	16,342	7,101	13
July	84,787	304	2,277	.....	33,100	121	25,718	16,095	7,159	13
August	84,356	297	2,257	.....	32,992	121	25,553	15,912	7,211	13
September	83,673	315	2,228	.....	32,565	121	25,458	15,937	7,035	14
October	82,590	323	2,209	.....	32,086	121	25,128	15,833	6,876	14
November	81,743	295	2,177	.....	31,591	121	24,868	15,916	6,762	13
December	81,922	293	2,143	.....	31,470	121	24,805	16,412	6,667	11
Both sexes										
January	176,884	403	5,303	.....	79,539	420	50,986	25,167	15,038	28
February	176,389	428	5,310	.....	79,342	420	51,015	24,866	14,980	28
March	177,070	457	5,337	.....	79,425	420	51,409	24,933	15,061	28
April	176,957	492	5,396	.....	79,308	420	51,469	24,853	14,988	31
May	176,929	498	5,493	.....	79,092	420	51,660	24,656	15,077	33
June	176,567	450	5,551	.....	78,653	420	51,675	24,605	15,182	31
July	175,510	409	5,371	.....	77,922	420	51,853	24,228	15,277	30
August	174,392	401	5,383	.....	77,232	420	51,612	24,025	15,289	30
September	172,542	417	5,315	.....	76,034	420	51,205	24,056	15,064	31
October	171,666	428	5,215	.....	76,070	420	50,807	23,932	14,762	32
November	169,813	396	5,163	.....	75,119	420	50,168	24,005	14,511	31
December	169,515	393	5,044	.....	74,693	420	50,089	24,453	14,394	29

TABLE 6.—NUMBER EMPLOYED ON THE 15TH OF EACH MONTH IN 1930 IN EACH GENERAL OCCUPATION GROUP IN OHIO, BY SEX AND INDUSTRY GROUP—Continued

Salespeople (not traveling)

Sex and month	All industries	Agriculture	Construction	Fisheries	Manufactures	Mining and quarrying	Service	Trade, wholesale and retail	Transportation and public utilities	Industries not otherwise classified
Males										
January	38,257	47	581	.....	3,561	.....	3,872	29,208	988	.....
February	38,236	43	595	.....	3,581	.....	4,019	29,005	993	.....
March	38,585	44	618	.....	3,590	.....	4,233	29,108	992	.....
April	39,460	68	620	.....	3,619	.....	4,383	29,759	1,011	.....
May	39,466	66	631	.....	3,662	.....	4,397	29,653	1,057	.....
June	39,347	54	623	.....	3,656	.....	4,307	29,628	1,079	.....
July	38,605	52	628	.....	3,670	.....	4,224	28,955	1,076	.....
August	38,074	45	635	.....	3,667	.....	4,108	28,535	1,084	.....
September	38,402	50	658	.....	3,689	.....	3,955	28,969	1,081	.....
October	38,483	54	649	.....	3,649	.....	3,827	29,237	1,067	.....
November	38,432	51	649	.....	3,625	.....	3,687	29,359	1,060	1
December	39,449	54	610	.....	3,634	.....	3,591	30,498	1,061	1
Females										
January	30,186	38	35	.....	1,294	.....	242	28,516	61	.....
February	30,323	38	35	.....	1,303	.....	256	28,633	58	.....
March	31,489	37	38	.....	1,332	.....	249	29,759	74	.....
April	33,899	47	39	.....	1,335	.....	286	32,111	81	.....
May	32,172	48	39	.....	1,352	.....	289	30,364	80	.....
June	32,010	35	36	.....	1,356	.....	318	30,178	87	.....
July	30,115	27	33	.....	1,357	.....	531	28,083	84	.....
August	29,554	26	32	.....	1,356	.....	505	27,553	82	.....
September	31,167	26	32	.....	1,345	.....	469	29,211	84	.....
October	32,338	26	33	.....	1,333	.....	450	30,417	79	.....
November	34,032	29	31	.....	1,306	.....	434	32,154	78	.....
December	42,557	33	34	.....	1,358	.....	439	40,610	83	.....
Both sexes										
January	68,443	85	616	.....	4,855	.....	4,114	57,724	1,049	.....
February	68,559	81	630	.....	4,884	.....	4,275	57,638	1,051	.....
March	70,074	81	656	.....	4,922	.....	4,482	58,867	1,066	.....
April	73,359	115	659	.....	4,954	.....	4,669	61,870	1,092	.....
May	71,638	114	670	.....	5,014	.....	4,686	60,017	1,137	.....
June	71,357	89	659	.....	5,012	.....	4,625	59,806	1,166	.....
July	68,720	79	661	.....	5,027	.....	4,755	57,038	1,160	.....
August	67,628	71	667	.....	5,023	.....	4,613	56,088	1,166	.....
September	69,569	76	690	.....	5,034	.....	4,424	58,180	1,165	.....
October	70,821	80	682	.....	4,982	.....	4,277	59,654	1,146	.....
November	72,464	80	680	.....	4,931	.....	4,121	61,513	1,138	1
December	82,006	87	644	.....	4,992	.....	4,030	71,108	1,144	1

Table 7 shows for 1930 the month of maximum and month of minimum employment and also the variation in number employed in each of the three general occupation groups. The data for each occupation group are given by industry groups.

TABLE 7.—MAXIMUM AND MINIMUM EMPLOYMENT IN EACH GENERAL OCCUPATION GROUP IN OHIO, 1930, BY SEX AND INDUSTRY GROUP

Wage earners

Sex and industry group	Maximum		Minimum		Variation from maximum	
	Number	Month	Number	Month	Number	Per cent
Males						
All industries	808,410	May	662,335	December	146,081	18.1
Agriculture	9,719	July	5,984	January	3,735	38.4
Construction	78,346	do	44,213	December	34,133	43.6
Fisheries	386	May	212	January, December	174	45.1
Manufactures	536,328	April	431,416	do	104,912	19.6
Mining and quarrying	28,909	October	26,715	July	2,194	7.6
Service	61,425	June	54,530	December	6,895	11.2
Trade, wholesale and retail	48,305	May	46,628	November	1,677	3.5
Transportation and public utilities	57,749	July	50,594	December	7,155	12.4
Females						
All industries	168,570	April	152,454	do	16,116	9.6
Agriculture	911	July	474	January	437	48.0
Construction	144	October	83	February	61	42.4
Fisheries						
Manufactures	101,522	March	88,578	December	12,944	12.7
Mining and quarrying						
Service	42,817	June	39,998	December	2,819	6.6
Trade, wholesale and retail	11,266	December	9,719	August	1,547	13.7
Transportation and public utilities	13,817	January	11,975	December	1,842	13.3
Both sexes						
All industries	976,911	May	814,789	do	162,122	16.6
Agriculture	10,630	July	6,458	January	4,172	39.2
Construction	78,479	do	44,333	December	34,146	43.5
Fisheries	386	May	212	January, December	174	45.1
Manufactures	637,676	April	519,994	do	117,682	18.5
Mining and quarrying	28,909	October	26,715	July	2,194	7.6
Service	104,242	June	94,528	December	9,714	9.3
Trade wholesale and retail	59,270	April	56,731	August	2,539	4.3
Transportation and public utilities	71,103	July	62,569	December	8,534	12.0

TABLE 7.—MAXIMUM AND MINIMUM EMPLOYMENT IN EACH GENERAL OCCUPATION GROUP IN OHIO, 1930, BY SEX AND INDUSTRY GROUP—Continued

Bookkeepers, stenographers, and office clerks

Sex and industry group	Maximum		Minimum		Variation from maximum	
	Number	Month	Number	Month	Number	Per cent
Males						
All industries	90,948	April	87,593	December	3,355	3.7
Agriculture	107	April, May, June.	100	do	7	6.5
Construction	3,235	June	2,901	do	334	10.3
Fisheries						
Manufactures	45,484	April	43,223	December	2,261	5.0
Mining and quarrying	(1)	(1)	(1)	(1)	(1)	(1)
Service	26,135	July	25,284	December	851	3.3
Trade, wholesale and retail	8,336	January	8,041	do	295	3.5
Transportation and public utilities	8,118	July	7,727	do	391	4.8
Females						
All industries	86,206	January	81,743	November	4,463	5.2
Agriculture	391	May	293	December	98	25.1
Construction	2,316	June	2,143	do	173	7.5
Fisheries						
Manufactures	34,151	January	31,470	December	2,681	7.9
Mining and quarrying	(1)	(1)	(1)	(1)	(1)	(1)
Service	25,875	May	24,805	December	1,070	4.1
Trade, wholesale and retail	16,831	January	15,833	October	998	5.9
Transportation and public utilities	7,211	August	6,667	December	544	7.5
Both sexes						
All industries	177,070	March	169,515	December	7,555	4.3
Agriculture	498	May	393	do	105	21.1
Construction	5,551	June	5,044	do	507	9.1
Fisheries						
Manufactures	79,539	January	74,693	December	4,846	6.1
Mining and quarrying	(1)	(1)	(1)	(1)	(1)	(1)
Service	51,853	July	50,089	December	1,764	3.4
Trade, wholesale and retail	25,167	January	23,932	October	1,235	4.9
Transportation and public utilities	15,289	August	14,394	December	895	5.9

Salespeople (not traveling)

Males						
All industries	39,466	May	38,074	August	1,392	3.5
Agriculture	68	April	43	February	25	(2)
Construction	658	September	581	January	77	11.7
Fisheries						
Manufactures	3,689	September	3,561	January	128	3.5
Mining and quarrying						
Service	4,397	May	3,591	December	806	18.3
Trade, wholesale and retail	30,498	December	28,535	August	1,963	6.4
Transportation and public utilities	1,084	August	988	January	96	8.9
Females						
All industries	42,557	December	29,554	August	13,003	30.6
Agriculture	48	May	26	August, September, October.	22	(2)
Construction	39	April, May	31	November	8	(2)
Fisheries						
Manufactures	1,358	December	1,294	January	64	4.7
Mining and quarrying						
Service	531	July	242	January	289	54.4
Trade, wholesale and retail	40,610	December	27,553	August	13,057	32.2
Transportation and public utilities	87	June	58	February	29	(2)
Both sexes						
All industries	82,006	December	67,628	August	14,378	17.5
Agriculture	115	April	71	do	44	38.3
Construction	690	September	616	January	74	10.7
Fisheries						
Manufactures	5,034	September	4,855	January	179	3.6
Mining and quarrying						
Service	4,755	July	4,030	December	725	15.2
Trade, wholesale and retail	71,108	December	56,088	August	15,020	21.1
Transportation and public utilities	1,166	June, August.	1,049	January	117	10.0

[1] All "office help" and fluctuation not reported. [2] Not computed on account of small number involved.

The maximum, minimum, and average number of males and females reported in each of the three general occupation groups are shown in Table 8 for each of the years, 1924 to 1930.

TABLE 8.—MAXIMUM, MINIMUM, AND AVERAGE NUMBER OF MALES AND FEMALES REPORTED IN EACH GENERAL OCCUPATION GROUP IN OHIO, 1924 TO 1930

Wage earners

Item	1924 (31,740 establishments)	1925 (34,628 establishments)	1926 (37,181 establishments)	1927 (39,656 establishments)	1928 (40,992 establishments)	1929 (43,181 establishments)	1930 (44,307 establishments)
Males							
Maximum month	789,457	837,381	875,444	836,494	869,270	916,978	808,416
Minimum month	730,615	744,327	787,792	749,785	725,946	782,529	662,335
Average of 12 monthly reports	755,062	800,471	833,030	805,001	817,288	868,834	753,395
Females							
Maximum month	148,403	160,576	168,944	172,279	178,214	191,212	168,570
Minimum month	137,779	144,391	154,712	156,733	157,861	174,078	152,454
Average of 12 monthly reports	144,477	152,297	161,136	164,440	169,068	182,555	162,726

Bookkeepers, stenographers, and office clerks

Males							
Maximum month	68,218	71,374	74,574	76,309	79,460	85,400	90,948
Minimum month	67,497	68,572	71,862	73,876	75,288	80,662	87,593
Average of 12 monthly reports	67,864	70,248	73,613	75,405	77,640	83,529	89,944
Females							
Maximum month	66,627	71,104	75,017	77,173	79,591	86,644	86,206
Minimum month	65,374	67,465	71,169	74,745	74,694	82,076	81,743
Average of 12 monthly reports	65,979	69,104	73,173	76,006	77,072	85,003	84,575

Salespeople (not traveling)

Males							
Maximum month	36,005	38,397	42,273	43,549	47,734	54,724	39,466
Minimum month	32,628	34,499	38,357	39,951	42,228	48,489	38,074
Average of 12 monthly reports	34,136	36,448	40,097	41,347	44,639	51,920	38,733
Females							
Maximum month	36,363	39,267	40,416	43,315	46,822	47,137	42,557
Minimum month	25,750	27,002	27,264	29,023	29,135	30,923	29,554
Average of 12 monthly reports	27,970	29,211	29,797	31,949	32,834	34,781	32,487

Table 9 presents a comparison of employment fluctuation in 1930 for males and females in all industries combined and in each of four industry groups which employ large numbers both of males and of females. The comparisons are for each of the three general occupation groups.

In the wage earners group, males show the wider fluctuation except in trade and in transportation and public utilities. In the clerical group and in the sales group females show a wider fluctuation than do males in each of the industry groups.

TABLE 9.—PER CENT OF VARIATION FROM MAXIMUM EMPLOYMENT OF MALES AND FEMALES IN GENERAL OCCUPATION GROUPS IN OHIO, 1930, BY SPECIFIED INDUSTRY GROUPS

Industry group	Wage earners		Bookkeepers, stenographers, and office clerks		Sales people (not traveling)	
	Males	Females	Males	Females	Males	Females
All industries	18.1	9.6	3.7	5.2	3.5	30.6
Manufactures	19.6	12.7	5.0	7.9	3.5	4.7
Service	11.2	6.6	3.3	4.1	18.3	54.4
Trade, wholesale and retail	3.5	13.7	3.5	5.9	6.4	32.2
Transportation and public utilities	12.4	13.3	4.8	7.5	8.9	[1]

[1] Not computed owing to small number involved.

EMPLOYMENT CONDITIONS

Made Work for Clerical Workers

BELIEVING that a need existed for the dissemination of information with regard to made-work programs in force for white-collar workers, the President's Organization on Unemployment Relief asked the Women's Bureau of the United States Department of Labor to undertake such a study. The preliminary report of the Women's Bureau is now available.

In commenting on the findings set forth in the report, Fred C. Croxton, assistant director of the President's Organization on Unemployment Relief, in a press release of February 4, 1932, calls attention to the fact that white-collar workers, under normal conditions, enjoy greater stability of employment than do other wage earners and are often less able to adjust themselves quickly to new lines of employment. The result is that special problems arise in the placement of these workers in periods of depression and special machinery is required for their placement and relief.

The specific fields of work recommended on the basis of this study include: (1) Special projects for white-collar workers; (2) supervisory work on projects for unskilled manual workers; (3) additions to the force in relief and welfare offices; and (4) additions to the force in nonprofit-making institutions. Among the special projects suggested are traffic counts, study of accidents, topographical surveys, and checking school attendance.

It is further brought out that special registration of white-collar workers is desirable and that in some instances it has been found advantageous to use volunteer investigators in interviewing unemployed white-collar workers.

Unemployment in Foreign Countries

THE following table gives detailed monthly statistics of unemployment in foreign countries, as shown in official reports, from January, 1930, to the latest available date.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES [1]

Date (end of month)	Australia		Austria	Belgium				Canada
	Trade-unionists unemployed		Compulsory insurance, number unemployed in receipt of benefit	Unemployment insurance societies				Per cent of trade-unionists unemployed
				Wholly unemployed		Partially unemployed		
	Number	Per cent		Number	Per cent	Number	Per cent	
1930								
January	[2]		273,197	22,542	3.5	25,782	4.0	10.8
February	[2]		284,543	16,085	2.6	31,222	4.9	11.5
March	63,144	14.6	239,094	14,030	2.2	28,469	4.5	10.8
April	[2]		192,477	13,715	2.2	36,065	5.8	9.0
May	[2]		162,678	12,119	1.9	38,761	6.1	10.3
June	80,595	18.5	150,075	12,226	1.9	41,336	6.5	10.6
July	[2]		153,188	15,302	2.4	48,580	7.7	9.2
August	[2]		156,145	17,747	2.8	51,649	8.2	9.3
September	90,279	20.5	163,894	23,693	3.8	61,623	9.9	9.4
October	[2]		192,778	27,322	4.3	54,804	8.5	10.8
November	[2]		237,745	38,973	6.1	76,043	12.0	13.8
December	104,951	23.4	294,845	63,585	9.3	117,167	17.0	17.0
1931								
January	[2]		331,239	77,181	11.1	112,734	16.2	16.0
February	[2]		334,041	81,750	11.7	121,906	19.4	15.6
March	113,614	25.8	304,084	81,305	11.3	125,972	17.7	15.5
April	[2]		246,845	70,377	10.0	110,139	15.6	14.9
May	[2]		208,852	56,250	7.9	97,755	13.8	16.2
June	118,424	27.6	191,150	62,642	8.9	101,616	14.4	16.3
July	[2]		194,364	64,644	9.1	116,747	16.3	16.2
August	[2]		196,321	70,893	9.9	120,669	16.8	15.8
September	120,694	28.3	202,130	74,175	10.3	119,433	16.6	18.1
October	[2]		228,101	82,811	11.3	122,773	16.8	18.3
November	[2]		273,658	93,487	13.3	134,799	19.2	18.6
December	118,732	28.0	329,595	128,000	17.0	----------	----------	21.1
1932								
January	[2]		358,104	----------	----------	----------	----------	----------

Date (end of month)	Czechoslovakia			Danzig (Free City of)	Denmark		Estonia
	Number of unemployed on live register	Trade-union insurance funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed		Number unemployed remaining on live register
		Number	Per cent		Number	Per cent	
1930							
January	73,891	39,199	3.6	19,282	55,876	20.3	5,608
February	86,156	40,550	3.6	21,153	59,363	21.0	4,580
March	88,005	45,567	4.0	20,376	47,109	15.6	3,575
April	79,721	42,664	3.7	18,371	33,471	11.8	2,227
May	77,069	41,098	3.8	16,232	27,966	9.4	2,065
June	73,464	37,853	3.4	14,975	24,807	8.7	910
July	77,309	46,800	4.1	15,330	26,200	9.3	762
August	88,005	52,694	4.7	15,687	26,232	9.0	1,039
September	104,534	57,542	5.3	16,073	27,700	9.0	1,414
October	122,379	61,213	5.5	17,307	32,880	11.4	3,282
November	155,203	65,904	5.9	20,272	44,200	15.3	5,675
December	239,564	93,476	8.3	24,429	71,100	24.6	6,163
1931							
January	313,511	104,580	9.5	27,081	70,961	24.2	5,364
February	343,972	117,450	10.0	28,192	73,427	26.0	4,070
March	339,505	119,350	10.0	27,070	67,725	22.1	2,765
April	296,756	107,238	8.9	24,186	45,698	15.3	2,424
May	249,686	93,941	7.6	20,686	37,856	12.3	1,368
June	220,038	82,534	6.6	19,855	34,030	11.3	931
July	209,233	82,759	6.6	20,420	36,369	11.8	634
August	214,520	86,261	6.9	21,509	35,060	11.8	933
September	228,383	84,660	6.7	22,922	35,871	12.1	2,096
October	253,518	88,600	6.9	24,932	47,196	16.0	5,425
November	336,874	[3] 105,846	8.3	28,966	66,526	22.3	7,554
December	480,775	----------	----------	32,956	91,216	30.4	----------
1932							
January	581,465	----------	----------	----------	105,600	35.1	----------

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Finland	France	Germany			
				Trade-unionists		
	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Per cent wholly unemployed	Per cent partially unemployed	Number unemployed in receipt of benefit
1930						
January	12,696	1,484	3,217,608	22.0	11.0	2,482,648
February	11,545	1,683	3,365,811	23.5	13.0	2,655,723
March	10,062	1,630	3,040,797	21.7	12.6	2,347,102
April	7,274	1,203	2,786,912	20.3	12.1	2,081,068
May	4,666	859	2,634,718	19.5	12.0	1,889,240
June	3,553	1,019	2,640,681	19.6	12.6	1,834,662
July	4,026	856	2,765,258	20.5	13.9	1,900,961
August	5,288	964	2,883,000	21.7	14.8	1,947,811
September	7,157	988	3,004,000	22.5	15.1	1,965,348
October	10,279	1,663	3,252,000	23.6	15.4	2,071,730
November	10,740	4,893	3,683,000	26.0	16.1	2,353,980
December	9,336	11,952	4,384,000	31.7	16.9	2,822,598
1931						
January	11,706	28,536	4,887,000	34.2	19.2	3,364,770
February	11,557	40,766	4,972,000	34.5	19.5	3,496,979
March	11,491	50,815	4,756,000	33.6	18.9	3,240,523
April	12,663	49,958	4,358,000	31.2	18.0	2,789,627
May	7,342	41,339	4,053,000	29.9	17.4	2,507,732
June	6,320	36,237	3,954,000	29.7	17.7	2,353,657
July	6,790	35,916	3,976,000	31.0	19.1	2,231,513
August	9,160	37,673	4,215,000	33.6	21.4	2,376,589
September	12,176	38,524	4,355,000	35.1	22.2	2,483,364
October	14,824	51,654	4,623,480	36.6	22.0	2,534,952
November	18,095	92,157	5,059,773	38.9	21.8	2,771,985
December	----------	147,009	5,668,187	42.2	22.3	3,147,867
1932						
January	----------	241,487	6,041,000	----------	----------	----------

Date (end of month)	Great Britain and Northern Ireland				Great Britain	Hungary		
	Compulsory insurance					Trade-unionists unemployed		
	Wholly unemployed		Temporary stoppages		Number of persons registered with employment exchanges	Christian (Budapest)	Social-Democratic	
	Number	Per cent	Number	Per cent			Number	Per cent
1930								
January	1,183,974	9.8	336,474	2.8	1,491,519	1,161	21,533	14.5
February	1,211,262	10.0	371,840	3.1	1,539,265	1,120	21,309	14.8
March	1,284,231	10.6	409,785	3.4	1,677,473	983	21,016	14.6
April	1,309,014	10.8	451,506	3.8	1,698,386	906	20,139	13.7
May	1,339,595	11.1	516,303	4.2	1,770,051	875	19,875	13.6
June	1,341,818	11.1	569,931	4.7	1,890,575	829	18,960	13.0
July	1,405,981	11.6	664,107	5.5	2,011,467	920	19,081	13.2
August	1,500,990	12.4	618,658	5.1	2,039,702	847	21,013	14.5
September	1,579,708	13.1	608,692	5.0	1,114,955	874	22,252	16.0
October	1,725,731	13.9	593,223	4.8	2,200,413	999	22,914	16.7
November	1,836,280	14.8	532,518	4.3	2,274,338	975	23,333	17.0
December	1,853,575	14.9	646,205	5.3	2,392,738	935	24,648	17.9
1931								
January	2,044,209	16.5	618,633	5.0	2,613,749	953	26,191	19.1
February	2,073,578	16.7	623,844	5.0	2,627,559	965	27,089	19.8
March	2,052,826	16.5	612,821	5.0	2,581,030	996	27,092	(1)
April	2,027,896	16.3	564,884	4.6	2,531,674	1,042	27,129	(1)
May	2,019,533	16.3	558,383	4.5	2,596,431	843	26,131	(1)
June	2,037,480	16.4	669,315	5.4	2,629,215	751	23,660	(1)
July	2,073,892	16.7	732,583	5.9	2,662,765	876	26,329	(1)
August	2,142,821	17.3	670,342	5.4	2,732,434	941	28,471	(1)
September	2,217,080	17.9	663,466	5.3	2,879,466	932	28,716	----------
October	2,305,388	18.1	487,591	3.8	2,755,559	1,020	28,998	----------
November	2,294,902	18.0	439,952	3.4	2,656,088	1,169	29,907	----------
December	2,262,700	17.7	408,117	3.2	2,569,949	1,240	31,906	----------
1932								
January	2,354,044	18.4	500,746	4.0	2,728,411	----------	----------	----------

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Irish Free State		Italy		Latvia	Netherlands	
	Compulsory insurance—unemployed		Number of unemployed registered		Number unemployed remaining on live register	Unemployment insurance societies—unemployed	
	Number	Per cent	Wholly unemployed	Partially unemployed		Number	Per cent
1930							
January	31,592	11.1	466,231	23,185	9,263	56,535	13.9
February	(1)		456,628	26,674	8,825	50,957	12.5
March	(1)		385,432	28,026	6,494	34,996	8.6
April	26,027	9.2	372,236	24,305	3,683	28,421	6.9
May	(1)		367,183	22,825	1,421	26,211	6.3
June	(1)		322,291	21,887	779	23,678	5.5
July	23,393	8.2	342,061	24,209	607	29,075	6.7
August	(1)		375,548	24,056	573	32,755	7.6
September	(1)		394,630	22,734	1,470	35,532	8.2
October	20,775	(1)	446,496	19,081	6,058	41,088	9.6
November	22,990	(1)	534,356	22,125	8,608	46,807	11.8
December	25,622	(1)	642,169	21,788	10,022	81,204	18.2
1931							
January	26,167	(1)	722,612	27,924	9,207	100,340	23.2
February	28,681	(1)	765,325	27,110	8,303	109,235	23.5
March	26,825	(1)	707,486	27,545	8,450	102,743	21.8
April	25,413	(1)	670,353	28,780	6,390	68,860	14.3
May	23,970	(1)	635,183	26,059	1,871	60,189	12.2
June	23,016	(1)	573,593	24,206	1,584	59,573	11.7
July	21,427	(1)	637,531	25,821	2,169	69,026	13.3
August	21,647	(1)	693,273	30,636	4,827	70,479	15.3
September	21,897	(1)	747,764	29,822	7,470	72,738	15.7
October	23,427	(1)	799,744	32,828	13,605	[3] 84,548	18.0
November	26,353	(1)	878,267	30,967	18,377	[3] 105,671	22.5
December	30,865	(1)	982,221	32,949	21,682	[3] 157,933	29.7
1932							
January			1,051,321			145,124	27.0

Date (end of month)	New Zealand		Norway			Poland	Rumania
	Trade-unionists unemployed		Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
	Number	Per cent	Number	Per cent			
1930							
January	(1)		7,786	19.0	22,549	241,974	12,622
February	4,348	8.5	7,851	18.9	22,974	274,708	15,588
March	(1)		7,503	17.8	22,533	289,469	13,045
April	(1)		6,701	15.8	19,829	271,225	13,412
May	5,884	10.9	5,239	12.2	16,376	224,914	25,096
June	(1)		4,700	10.8	13,939	204,982	22,960
July	(1)		4,723	10.8	11,997	193,687	23,236
August	7,197	13.5	5,897	13.4	12,923	173,627	24,209
September	(1)		7,010	15.7	17,053	170,467	39,110
October	(1)		8,031	18.0	20,363	165,154	36,147
November	8,119	15.5	9,396	21.4	24,544	209,912	42,689
December	(1)		11,265	25.5	27,157	299,797	36,212
1931							
January	(1)		11,692	26.3	28,596	340,718	38,804
February	(1)		(1)		29,107	358,925	43,270
March	[4] 29,434		11,213	24.9	29,095	372,536	48,226
April	[4] 37,598		(1)		28,477	351,679	41,519
May	[4] 36,921				25,206	313,104	33,484
June	[4] 42,523				22,736	274,942	28,093
July	[4] 46,359				20,869	255,179	29,250
August	[4] 48,396				22,431	246,380	22,708
September	[4] 51,018				27,012	246,426	22,969
October	[4] 51,408		[5] 9,048	[5] 19.6	29,340	255,622	28,800
November	[4] 49,935		10,577	22.8	32,078	266,027	43,917
December	[4] 47,096				34,789	289,100	49,393
1932							
January						325,782	

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Saar Territory	Sweden		Switzerland				Yugoslavia
		Trade-unionists unemployed		Unemployment funds				
				Wholly unemployed		Partially unemployed		
	Number unemployed registered	Number	Per cent	Number	Per cent	Number	Per cent	Number of unemployed registered
1930								
January	11,307	45,636	14.2	10,523	4.4	10,710	4.4	8,508
February	11,949	45,460	13.2	9,971	4.1	11,445	4.7	9,437
March	8,882	42,278	12.5	7,882	2.6	12,642	4.2	9,739
April	7,522	38,347	11.1	5,203	2.1	12,755	5.3	12,052
May	7,362	28,112	8.3	5,356	2.2	13,129	5.4	8,704
June	6,330	28,956	8.1	5,368	1.7	17,688	5.7	6,991
July	7,095	27,170	7.8	4,751	1.9	15,112	6.2	7,236
August	7,099	28,539	8.1	5,703	2.3	19,441	7.9	6,111
September	7,527	34,963	9.8	7,792	2.5	26,111	8.3	5,973
October	9,013	43,927	12.2	7,399	3.0	23,309	9.4	6,609
November	12,110	57,070	15.3	11,666	4.7	25,793	10.5	7,219
December	15,245	86,042	22.9	21,400	6.6	33,483	10.4	9,989
1931								
January	18,921	69,437	19.8	20,551	8.3	30,977	12.5	11,903
February	20,139	66,923	18.4	20,081	7.9	30,879	12.2	14,424
March	18,292	72,944	19.3	18,991	5.4	41,880	12.4	12,029
April	18,102	64,534	17.5	10,389	4.0	27,726	10.6	11,391
May	14,886	49,807	13.2	9,174	3.5	26,058	9.9	6,929
June	15,413	45,839	12.1	12,577	3.6	34,266	9.7	4,431
July	17,685	46,180	12.4	12,200	3.3	39,000	11.3	6,672
August	20,205	48,590	12.7	9,754	3.6	33,346	12.4	7,466
September	21,741	54,405	13.7	15,188	4.0	42,998	11.2	7,753
October	24,685	65,469	16.4	18,000	4.8	47,200	13.2	10,070
November	28,659	79,484	19.9	25,200	6.6	51,900	14.4	10,349
December	----------	110,149	27.2	41,611	10.1	---------	------	----------

[1] Sources: League of Nations—Monthly Bulletin of Statistics; International Labor Office—International Labor Review; Canada—Labor Gazette; Great Britain—Ministry of Labor Gazette; Austria—Statistische Nachrichten; Australia—Quarterly Summary of Australian Statistics; Germany—Reichsarbeitsblatt, Reichs Arbeitsmarkt Anzeiger; Switzerland—Wirt. u. Social. Mitteilungen, La Vie Economique; Poland—Wiedemosci Statystyczne; Norway—Statistiske Meddelelser; Netherlands—Maandschrift; Sweden—Sociala Meddelenden; Denmark—Statistiske Efterretninger; Finland—Bank of Finland Monthly Bulletin; France—Bulletin du Marché du Travail; Hungary—Magyar Statisztikai Szemle; Belgium—Revue du Travail; New Zealand—Monthly Abstract of Statistics; U. S. Department of Commerce—Commerce Reports; and U. S. Consular Reports.

[1] Not reported.

[2] Provisional figure.

[4] New series of statistics showing unemployed registered by the employment exchanges. Includes not only workers wholly unemployed but also those intermittently employed.

[5] Strike ended. Provisional figure.

Recreation Centers for the Unemployed in Montreal

THE Montreal Council of Social Agencies has completed plans for the establishment of recreation centers for unemployed workers in that city. Among the activities available will be checker playing, volley ball, basketball, hockey, boxing, and swimming.[1] Some of the centers will be open in the evening and others in the morning or afternoon. Instead of remaining indoors at home all day or walking the streets the jobless men, it is hoped, will be able to forget their troubles to some extent while they are playing and taking physical exercise.

[1] Canadian Congress Journal, Ottawa, January, 1932, p. 20.

English Studies of Unemployed and of Persons Insured Against Unemployment

THE English Government has recently published the results of two studies made by the sample method, one dealing with persons insured against unemployment at the beginning of July, 1930, and the other with persons registered as unemployed on February 2, 1931. The Ministry of Labor Gazette for January, 1932, contains a summary of these studies, from which the following data are taken.

Persons Insured, July, 1930

THE study included 120,000 persons insured under the unemployment insurance acts, of whom 86,740 were males and 33,260 were females. The number of insured workers at that date was 12,000,000, so that the sample represents 1 per cent of the total. The facts on record made possible analyses as to age, industry, contributions made, and benefits drawn, but not as to marital state, dependents, or personal qualifications and disabilities.

For the group as a whole, 55.9 per cent of the males and 80.5 per cent of the females were under 35 years, but the age distribution varied with different industries. In general, the heavy industries included a larger proportion of middle-aged men than the light trades, while the industries which tend to employ large numbers of the unskilled show heavier proportions of the older men. The records showed for each person the industry in which he was employed when he entered insurance, as well as that in which he was when the sample was taken, and from these facts it was possible to draw some conclusions as to the mobility of labor.

For all industries combined 64.2 per cent of the males were in the same industry classification in July, 1930, as at their entry into insurance, and 35.8 per cent had had a change of classification. A small part—not exceeding 2.5 per cent—of this change may have been due to a change in the basis of industrial classification which took place in July, 1923; allowing for this, it would appear that about one-third of the men and youths insured in July, 1930, had moved at least once from one industry to another since their entry into insurance. The average period covered by the record was seven years for men and 5.4 years for women. In some industries the transference is much more frequent than in others. Speaking generally, there is less transference among females than among males.

Contributions and Benefits

Over one-third (35.4 per cent) of the males and nearly one-half (48.4 per cent) of the females had never drawn unemployment benefit between November, 1920, and December, 1930. This is partly a matter of age, as the risk of unemployment increases with years. "Among men aged 60 to 64 the rate of unemployment is 50 per cent higher than at ages 40 to 44." Unemployment, while frequent, seemed to be in the majority of cases either intermittent or of short duration.

More or less continuous unemployment is confined to a very small section of the insured population, which can not include more than about 100,000 men and 3,000 women. This group represents the maximum size of the "standing army" of the unemployed. The number of those who have had no unemployment is at least 30 times as large. Between these two extremes there is a group, about one and a half times as numerous as the other two combined, and including about 5,500,000 men and 1,700,000 women, among whom employment and unemployment are intermittent. In this group the degree of unemployment is not uniform. Among at least half the group unemployment is almost negligible, and it becomes serious among only about 10 per cent.

The proportion of those among whom unemployment had been severe varied widely in the different industries. This is indicated in the following table, which shows, for the leading industries, the average number of days' benefit drawn for each 100 contributions paid by those of the sample who were in the various industry classifications in July, 1930:

TABLE 1.—RELATION BETWEEN CONTRIBUTIONS PAID AND BENEFITS DRAWN UNDER UNEMPLOYMENT INSURANCE IN GREAT BRITAIN

Principal industries and sex	Days' benefit per 100 contributions	Principal industries and sex	Days' benefit per 100 contributions
Males		*Females*	
Ship building and repairing	194	Cotton	85
Public works contracting	144	Woolen and worsted	50
Iron and steel	126	Other textiles	52
Dock, harbor, etc., service	100	Metal trades	43
Coal mining	70	Food, drink, and tobacco	31
Engineering	69	Clothing	25
Cotton	68	Paper	21
Building	59	Printing, publishing, etc	20
Motor vehicles, etc	50	Distributive trades	18
Woolen and worsted	50		
Clothing	37		
Food, drink, and tobacco	31		
Distributive trades	31		
Paper	29		
Printing, publishing, etc	20		
All industries	59	All industries	35

The act of 1920 had laid down the rule, afterward abrogated, that not more than one week's benefit would be allowed for each six contributions paid. Applying this rule to an industry, each 100 contributions paid in might be said to represent a liability for benefit for 16⅔ weeks, or, roughly, 116 days. (B. L. S. Bull. No. 544, p. 277.) The industries included in this table are those in which unemployment is heaviest, and it will be noticed that for men in three cases the average period through which benefits were paid per 100 contributions exceeded that established by the above-mentioned rule, while for women the full period was not reached in any case. Taking this group of industries as a whole, neither for men nor for women were benefits paid throughout the full period which the 100 contributions would have justified.

Transitional and Standard Benefit

Of the workers included in the sample, 32,384 males and 11,238 females claimed unemployment benefit in 1930, and of these 3,754 males (12 per cent) and 1,182 females (10.5 per cent) were qualified for the transitional benefit only on the basis of their contribution record as it stood in the last quarter of the year.

Age had a considerable influence on the relative proportions entitled to standard and transitional benefit, respectively, and on the rate of change in personnel. Thus, in the age group 18 to 20, only 8.7 per cent of the males and 6.6 per cent of the females with claims current at December 17, 1930, were qualified for transitional benefit only, while in the age group 55 to 64, the proportions had risen to 28.9 and 14.5 per cent, respectively.

The proportion of transitional to standard benefit claimants in some of the more important industries is shown in the following table:

TABLE 2.—PER CENT OF CLAIMANTS ON TRANSITIONAL BENEFIT UNDER UNEMPLOYMENT INSURANCE IN GREAT BRITAIN

Principal industries	Per cent on transitional benefit	Principal industries	Per cent on transitional benefit
Males		*Females*	
Public works contracting	33.9	Distributive	13.7
Coal mining	26.6	Cotton	12.4
Distributive	21.7	Printing, publishing, and bookbinding	12.2
Shipbuilding and ship repairing	19.0	Food, drink, and tobacco	11.6
Clothing	14.9	Pottery	8.8
Iron and steel	14.0	Woolen and worsted	7.8
Motor vehicles	13.1	Clothing	7.3
Building	12.9	Engineering	4.1
Engineering	12.4		
Cotton	11.2		
Dock and harbor service	9.7		
Woolen and worsted	8.3		
Paper	8.1		
All industries	17.4	All industries	12.7

Persons on Unemployment Register, February, 1931

THE second study was based on a sample aggregating one-half of 1 per cent of all persons aged 18 and over, employed or unemployed, on the registers of the employment exchanges of Great Britain on February 2, 1931. In regard to age, and to the connection between age and unemployment, the study showed little that was new. Among men the increase in unemployment had affected all age groups in much the same degree; among women it was less apparent among those under 25 than in the older age groups.

Employability

Over 70 per cent of those interviewed were reported to be of good physique, while over 80 per cent were in good health, and a similar per cent had no physical defects.

The definitions of the various categories of employability were different from those used in the previous investigations; each person interviewed was judged in relation to his suitability for submission to a local vacancy without exceptional features in his own occupation. Judged by the new standards, 75 per cent of the men and 80 per cent of the women were considered to be suitable on all grounds for submission to such a vacancy; 16.5 per cent of the men and 13.3 per cent of the women came short of the standard in personal qualifications (age, physical condition, etc.); 5 per cent of the men and 4 per cent of the women were considered to have adequate personal qualifications, but their industrial experience was such as to make their engagement doubtful; and 3.4 per cent of the men and 2.8 per cent of the women were considered to be unsuitable on both grounds (industrial experience and personal qualifications).

Those on transitional benefit had distinctly lower employment qualifications than those on standard benefit. For example, among men, 82 per cent of those on standard benefit were placed in category A (those suitable on all grounds), but only 52 per cent of those on transitional benefit. This was in part due to the higher average age of those on transitional benefit.

Education, Marital Condition, and Dependents

The great majority had attended elementary schools only, and had left them early. "Nearly 90 per cent of the men and 80 per cent of the women under 30 years of age started work before reaching 15." Slightly over one-fourth (26 per cent) of the men and 7 per cent of the women claimed to have been apprenticed to a trade; the proportions were higher among those on standard than among those on transitional benefit. The proportion of married men was higher than at any previous investigation, and the proportion of married women claimants to benefit was nearly double that found in the investigation of April, 1927. Of every 100 men whose claims to benefit had been approved, 54 had dependents, consisting of 50 adults and 82 children. Among those with dependent children the average number of children was 2.2. Only 3 per cent of the women with authorized claims had dependents.

Employment and Unemployment Record

As to employment record, the following was found:

In the year ended January, 1931, a year of industrial depression, over 6 per cent of the men on standard benefit at February 2, 1931, had paid 50 or more weekly contributions, and about 56 per cent had paid 30 or more; only 4 per cent had paid no contributions. Among the men on transitional benefit, about 46 per cent had paid no contributions in the year. The figures for women showed a slightly less favorable record. * * *

For the nine years, July, 1921, to June, 1930, taken as a whole, 18 per cent of the men on standard benefit at February 2, 1931, had paid the maximum number of contributions throughout the whole period, and over 55 per cent had paid nearly 80 per cent of the maximum. The record for those on transitional benefit fell much below this standard. For women on standard benefit the record was similar to that of the men, but women on transitional benefit had a better record than the men in the same class. * * *

Among men 30 per cent of those on standard benefit and 5.5 per cent of those on transitional benefit had been unemployed for not more than 12 weeks in the year ended January, 1931; 30 per cent of the men on standard benefit and 6 per cent of those on transitional benefit had been unemployed for 12 to 24 weeks; while less than 2 per cent of those on standard benefit and 20 per cent of those on transitional benefit were unemployed the whole year. * * *

On the average the men on standard benefit had been continuously unemployed for 63 days as compared with 173 days for those on transitional benefit. The last spell of continuous unemployment extended to not more than 4 weeks among 41.7 per cent of the men on standard benefit and 11.2 per cent of those on transitional benefit; and it was not more than 12 weeks in the case of 69 per cent of those on standard benefit and 28 per cent of those on transitional benefit. The figures for women were similar.

If the 7-year period ended January, 1931, is taken as a whole, nearly 36 per cent of the men and 43 per cent of the women on standard benefit, and 6 per cent of the men and 16 per cent of the women on transitional benefit at February 2d had drawn benefit for less than 10 per cent of the total period.

Movement of English Workers from Uninsured to Insured Occupations

THE question has often been raised as to the extent to which workers in Great Britain were passing from the uninsured to the insured occupations, and to throw some light on the movement the Ministry of Labor recently made a special analysis of the new entrants into unemployment insurance during the 12 months ending in April, 1931. Some particulars of this study are given in the Ministry of

Labor Gazette for December, 1931 (p. 456). During the period covered the total number of new entrants was 755,130, of whom 178,819 were adults and 576,311 were juveniles. The following description is given of the data on which the analysis was based:

> As soon as a worker aged 16 to 64 has obtained employment in an insured trade, or reaches the age of 16 while in such employment, he is required to make application for an unemployment book, and at the same time, under the normal procedure, a special inquiry form is completed at a local office of the Ministry of Labor in respect of every applicant for a book, with the exception of juveniles who apply within two months of reaching 16 years of age. Particulars are entered on the form respecting the applicant's previous employment record, his age, and the insurable employment in respect of which an unemployment book is being issued. An unemployment book is not issued unless insured work has been obtained. The following analysis has been derived from an examination of those inquiry forms which indicated previous employment in uninsured occupations. These figures, it should be observed, relate solely to persons entering trades, and make no allowance for the movement from insured to uninsured occupations, e. g., from hotel or restaurant work to private domestic service.

The inquiry dealt with 97,185 persons entering insured trades during the period covered who had had employment in uninsured occupations previous to entering insurance. This was 12.9 per cent of the total number of new entrants during the year. The following table shows, by number and per cent, the previous occupational distribution of the entrants:

PREVIOUS OCCUPATIONAL DISTRIBUTION OF NEW ENTRANTS INTO INSURED TRADES IN GREAT BRITIAN

Previous record	Number	Per cent of those with former uninsured employment	Per cent of total new entrants
Agriculture	25,041	25.8	3.3
Domestic service	33,049	34.0	4.4
Work on own account	20,251	20.8	2.7
From abroad	5,787	6.0	.8
Salary over £250 a year	4,635	4.8	.6
Work unspecified	4,311	4.4	.6
Exempt or excepted	2,830	2.9	.4
Irish immigrants	1,281	1.3	.1
Total	97,185	100.0	12.9

Nearly 50 per cent of the adult new entrants had had previous uninsured employment, but among juveniles the percentage was only 1.8. Over 22,000, or 26 per cent of the adults who had had uninsured employment, had been engaged in agriculture. Over 26,000, or 31 per cent, had been in domestic service, and nearly 20,000 or 23 per cent, had been working on their own account. Among the juveniles with previous uninsured employment, 62 per cent had been engaged in domestic service, and 26.9 per cent in agriculture. The analysis did not distinguish males from females, but no doubt most of those from domestic service were females and most of those from agriculture were males.

Incidentally it is mentioned that some examination was made of the group, numbering about 92,000, who had entered insurance for the first time after reaching 18 years of age and who had had no previous uninsured employment. Of these, about 80 per cent were women, of whom about 75 per cent had been engaged in home duties, a few had been receiving education, and the rest had been unoccupied. Among the men in this class about 25 per cent had been receiving education, about 10 per cent had been working for parents, and the others had been unoccupied.

A study of the occupations which the new entrants who had previously worked entered during the year showed that nearly 40 per cent found employment in the distributive trades, and over 15 per cent in building and public works contracting. The distributive trades have suffered relatively less than many other industries from the depression, and an increasing proportion of the insured population is found in them. Many of those entering them came from domestic service, or from working on their own account.

It is well known that there is a considerable movement into this industry of girls from domestic service; while the number of persons entering from work on their own account is probably influenced by the difficulty of maintaining small independent businesses in the face of trade depression and the increasing competition of large stores. As might be expected a large proportion of the entrants from domestic service found employment in hotel, etc., service.

Over 30 per cent (8,067) of the men from agriculture entered the building and public works contracting industries. * * *

Nearly 50 per cent of the entrants from uninsured occupations were under 25 years of age, and the average number at each year of age in the 16–24 age group was over three times the corresponding number in later age groups.

Of those who had been employed in domestic service and agriculture the percentages under 25 years of age were 69.7 and 54.8, respectively. The number of adult entrants from these two occupations decreased steadily with advancing age, whereas the numbers who had been working on their own account were fairly evenly distributed between ages 18 and 54.

INSURANCE AND BENEFIT PLANS

Wisconsin Unemployment Insurance Law

ON JANUARY 28, 1932, the first unemployment insurance law adopted by any State in the Union was approved by the Governor of Wisconsin, and constitutes chapter 20, Wisconsin Special Session Laws of 1931.

The Wisconsin Legislature, by the enactment of the law, intended to make certain that by July 1, 1933, a majority of the employees working for industrial companies in the State would have some adequate system of unemployment compensation. Before June 1, 1933, therefore, it is incumbent upon the employers of at least 175,000 employees to establish voluntarily some unemployment insurance plan which meets the standards prescribed by the act; otherwise the act will automatically become compulsory on July 1, 1933. Proposed voluntary plans may be submitted to the Wisconsin Industrial Commission for its written approval.

By June 15, 1933, the industrial commission must ascertain whether a sufficient number of employers have undertaken voluntary plans, and file its findings with the secretary of state. Public notice of the results must be given in the official State paper by the secretary of state. In the event the compulsory plan does not become operative, the industrial commission continues a supervision over the voluntary plans, and must keep itself informed of the operations of all such plans of unemployment insurance established in the State and publish pertinent statistics regarding the plans.

In order to assist in carrying out the purposes of the act, it provides that any county or municipality may, subject to the approval by the industrial commission, establish and maintain local free-employment offices, and the industrial commission may also establish such offices on its own responsibility.

An appropriation of $25,000 is made available until June 30, 1933.

Briefly the act provides the following:

1. It recognizes the economic loss resulting from unemployment and endeavors to provide a constructive solution of the problem.

2. It covers all employers employing 10 or more persons for four or more months during the preceding calendar year. The following are specifically excluded: Farm laborers, domestic servants, public officers, school teachers, interstate railroad employees, or persons engaged in governmental unemployment relief projects, or anyone who is unable or unwilling to work normal full time.

3. Contributions to the unemployment reserve fund are made by the employer at the rate, for the first two years of contribution, of 2 per cent of his annual pay roll (not including salaries of employees receiving more than $1,500 per year or $300 or more per month). Thereafter, whenever a reserve has been built up amounting to $55 per employee, the rate of contribution is reduced to 1 per cent, and when and during the period that the reserve per employee amounts to $75 contributions

cease. Whenever the reserve falls below $75 contributions begin again. In addition, the employer is obliged to contribute to the administration fund at the rate of two-tenths of 1 per cent of his annual pay roll. Any agreement between employer and employee by which the latter agrees to pay any part of the regular contribution is void. However, employees may contribute voluntarily to the fund in order to obtain higher benefits than those established by the act.

4. Benefits for total unemployment become payable after a waiting period of two weeks and are at the rate of $10 a week, or 50 per cent of the average weekly wage, whichever is lower, unless the wage is less than $5, when a benefit of $5 is paid. For partial unemployment the benefit is the difference between the employee's actual wages and the weekly benefit to which he would be entitled if totally unemployed. An additional $1 per week is provided in the event the employee attends a vocational or other school during the period of his unemployment. The maximum period of benefit in any one calendar year is limited to 10 weeks.

No benefits are to be paid if the employee has lost his employment because of misconduct or has quit voluntarily or because of a trade dispute, if the place of business is destroyed, if he earned $1,500 or more during the preceding 12 months, or for several other reasons. Benefits cease in case of refusal to accept suitable employment.

5. The act is administered by the State industrial commission.

6. For violations of the act—making false statements, deducting contributions from an employee's wages, refusing to pay contributions, failing to testify or produce books, etc.—a penalty of $25 to $100, or imprisonment for a maximum of 30 days, or both, is provided.

Because this act is the first which any State in the Union has enacted dealing with the problem of unemployment insurance, and because of its widespread interest it has been deemed advisable to reproduce the act in full.

CHAPTER 20

SECTION 1. *Legislative intent.*—(1) The legislature intends through this act to make it certain that by July 1, 1933, at least a majority of the employees of this State will enjoy the protection of fair and adequate systems of unemployment compensation. The largest organization of employers in the State having declared it to be the intention of its members voluntarily to establish unemployment fund systems, it is the intent of the legislature to give employers a fair opportunity to bring about the purposes of this act without legal compulsion. If by June 1, 1933, the employers of not less than 175,000 employees have voluntarily established plans which comply with the standards prescribed in section 108.15 of this act, then the compulsory system provided for in section 2 shall not take effect; otherwise, it shall take effect July 1, 1933. Should this provision for any reason be held invalid it is the intent of the legislature that the compulsory plan shall take effect July 1, 1933.

SEC. 2. A new chapter and a new section are added to the statutes to read:

CHAPTER 108.—*Unemployment reserves and compensation*

SECTION 108.01. *Declaration of public policy.*—As a guide to the interpretation and application of this chapter the public policy of this State is declared as follows:

(1) Unemployment in Wisconsin has become an urgent public problem, gravely affecting the health, morals, and welfare of the people of this State. The burden of irregular employment now falls directly and with crushing force on the unemployed worker and his family, and results also in an excessive drain on agencies for private charity and for public relief. The decreased and irregular purchasing power of wage earners in turn vitally affects the livelihood of farmers,

merchants, and manufacturers, results in a decreased demand for their products, and thus tends partially to paralyze the economic life of the entire State. In good times and in bad times unemployment is a heavy social cost, now paid mainly by wage earners. Industrial and business units in Wisconsin should pay at least a part of this social cost caused by their own irregular operations. To assure somewhat steadier work and wages to its own employees, a company can reasonably be required to build up a limited reserve for unemployment, and out of this to pay unemployment benefits to its workers, based on their wages and lengths of service.

(2) The economic burdens resulting from unemployment should not only be shared more fairly, but should also be decreased and prevented as far as possible. A sound system of unemployment reserves, contributions, and benefits should induce and reward steady operations by each employer, since he is in a better position than any other agency to share in and to reduce the social costs of his own irregular employment. Employers and employees throughout the State should cooperate, in advisory committees under Government supervision, to promote and encourage the steadiest possible employment. A more adequate system of free public employment offices should be provided, at the expense of employers, to place workers more efficiently and to shorten the periods between jobs. Education and retraining of workers during their unemployment should be encouraged. Governmental construction providing emergency relief through work and wages should be stimulated.

(3) A gradual and constructive solution of the unemployment problem along these lines has become an imperative public need.

SEC. 108.02. *Definitions.*—As used in this chapter:

(*a*) "Commission" shall mean the industrial commission.

(*b*) "Workmen's compensation act" shall mean sections 102.01 to 102.35.

(*c*) "Employee," except where the context clearly shows otherwise, shall mean any person who is employed by an employer and in an employment subject to this chapter, or who has been so employed within the last six months: *Provided*, That an independent contractor shall be deemed an "employer," and that all persons employed by subcontractors under him shall be deemed his "employees" for the purposes of this chapter.

(*d*) "Employer," except where the context clearly shows otherwise, shall mean any person, partnership, association, corporation (or legal representative of a deceased person, or a receiver or trustee of a person, partnership, association, or corporation), including this State and any municipal corporation or other political subdivision thereof, who or whose predecessor in interest has for four months or more within the preceding calendar year employed 10 or more persons in employments subject to this chapter. There shall be included in such calculation all persons thus employed by the employer throughout the entire State, and all of the several places of employment maintained within Wisconsin by the employer shall be treated as a single "employer" for the purposes of this chapter: *Provided, moreover*, That where any employer, either directly or through a holding company or otherwise, has a majority control or ownership of otherwise separate business enterprises employing persons in Wisconsin, all such enterprises shall be treated as a single "employer" for the purposes of this chapter.

(*e*) An "employment," except where the context shows otherwise, shall mean any employment, during any week, in which all or the greater part of the person's work is performed within Wisconsin, under any contract of hire, express or implied, oral or written, including all contracts entered into by helpers and assistants of employees, whether paid by employer or employee, if employed with the knowledge actual or constructive of the employer; except that for the purposes of this chapter an "employment" shall not include:

1. Employment as a farm laborer;
2. Employment in the personal or domestic service of an employer at his home;
3. Employment on a governmental unemployment relief project, approved as such by the commission;
4. Employment as an elected or appointed public officer;
5. Employment by a governmental unit on an annual salary basis;
6. Employment as a teacher in a private or public school, college, or university for the regular term for which such school, college, or university is in session;
7. Employment of a person who is unable or unwilling to work normal full time and who, before accepting a part-time job, has registered at his district public employment office as a "part-time worker," in such written form as the commission may prescribe: *Provided, however*, That for the purposes of this chapter

no person shall be treated as a "part-time worker" who customarily works half or more than half the full-time hours per week which prevail in such establishment for full-time employees.

8. Employment by railroads engaged in interstate transportation and employment in logging operations.

(*f*) An employee's "weeks of employment" by an employer shall mean all those weeks during each of which the employee has performed any services at all for the employer.

(*g*) "Benefits" shall mean the money allowance payable to an employee as compensation for his wage losses due to unemployment as provided in this chapter.

(*h*) "Wages" shall mean what is customarily meant by the term, except that it shall include bonuses and the reasonable value of board, rent, housing, lodging, or similar advantage received from the employer.

(*i*) An employer's "full-time hours per week" shall be determined for each general class of his employees (classifying together all those usually employed on substantially the same schedule of weekly hours). The commission shall calculate an employer's full-time hours per week, applicable to all his employees of the given class, by averaging the weekly hours worked by the majority of such employees for each week during the preceding calendar year in which such prevailing hours were 40 or more: *Provided*, That, in cases where it finds that the above method can not reasonably and fairly be applied, the commission may adopt such other comparable method or methods of determining an employer's full-time hours per week as it deems reasonable and suitable under this chapter.

(*j*) An employee's "average weekly wage" shall mean the weekly earnings such employee would average from the particular employer if employed that number of full-time hours per week of such employer which is applicable to such employee. Accordingly—each employee's "average weekly wage" shall be calculated by multiplying such applicable full-time hours per week by the employee's average earnings per hour from such employer. Each employee's earnings per hour (averaged for 100 or more hours of employment, so far as possible) shall for this purpose be calculated at such times and in such manner and in accordance with such suitable rules as the commission may prescribe with a view to determining benefits under this chapter.

(*k*) "Fund" shall mean the unemployment reserve fund established in section 108.16.

(*l*) "Employer's account" shall mean the separate unemployment reserve account of an employer with the above fund.

(*m*) "Reserve per employee" shall refer to the status of an employer's account at the beginning of a calendar month. It shall be calculated by dividing the net amount such employer's account then has (or would have if all contributions due under this chapter had peen paid) by the maximum number of employees subject to this chapter employed by such employer in any week during the preceding six months.

(*n*) "Administration fund" shall mean the fund established in section 108.20.

SEC. 108.03. *Payment of benefits.*—(1) Benefits shall be paid by the commission to each unemployed employee from his employer's account in the fund under the conditions and in the amounts stated in this chapter; except that employers exempted under subsection (2) of section 108.15 shall pay benefits directly to their unemployed employees under the conditions and in the amounts stated in the plan approved by the commission as the basis for the exemption.

(2) No benefits shall become payable from any employer's account, nor shall any employer's benefit liability begin to accrue under section 108.06, until one year after he has begun to make the regular and continuing contributions required of him under this chapter, except as otherwise provided in subsection (5) of section 108.15 and subsection (8) of section 108.16: *Provided*, That at the end of such year period each employer's benefit liability shall begin to accrue and benefits shall accordingly become payable from his account.

(3) The commission shall determine or approve the time and method of payment of benefits.

SEC. 108.04. *Eligibility for benefits.*—(1) No employees shall be deemed eligible for benefits for partial or total unemployment unless he gives the notification of such unemployment required under subsection (1) of section 108.08, or unless such notification is waived by the commission in accordance with such section.

(2) No employee shall be deemed eligible for benefits on account of either partial or total unemployment during any calendar week unless such employee was physically able to work and available for work whenever with due notice called on by his employer to report for work. Nor shall any employee be deemed

eligible for benefits for total unemployment for any calendar week in which he has suitable employment, as defined in subsection (6) of this section; *Provided*, That nothing in this section shall render an employee ineligible for total unemployment benefits for any calendar week on the ground that such employee is employed on a governmental unemployment relief project under section 108.25.

(3) An employee shall be deemed partially unemployed in any calendar week, and shall at once be eligible for benefits for such partial unemployment, whenever his week's wages are less than the amount of weekly benefit to which he would be entitled under this chapter if totally unemployed.

(4) An employee shall be deemed totally unemployed in any calendar week when he performs no services whatsoever for his current employer during such week. An employee thus unemployed shall be eligible for benefits for total unemployment for each week of total unemployment occurring subsequent to a waiting period of two such weeks. No benefit shall be or become payable for this required waiting period, but not more than two such weeks of waiting period per employer shall be required of any employee in any 12 months in order to establish his eligibility for total unemployment benefits under this section. The commission may approve in an approved voluntary unemployment benefit plan, such longer or shorter waiting period as will comply with the requirements of subsection (2) of section 108.15.

(5) An employee shall not be deemed eligible for any benefits for total unemployment based on his past weeks of employment, and no such benefits shall be payable to the employee under any of the following conditions:

(*a*) If he has lost his employment through misconduct;

(*b*) If he has left his employment voluntarily without good cause attributable to the employer;

(*c*) During any period for which he has left and is out of employment because of a trade dispute still in active progress in the establishment in which he was employed;

(*d*) For any period during which he is out of employment because of an act of God affecting his place of employment;

(*e*) If he has received in wages $1,500 or more during the 12 months preceding the date on which he became totally unemployed;

(*f*) If he is ordinarily self-employed, but has been temporarily (for not more than five months) employed in an employment subject to this chapter and can, at the termination of such temporary employment, reasonably return to his self-employment;

(*g*) If he attended a school, college, or university in the last preceding school term, and has been employed by his employer only during the customary summer vacation of schools, colleges, and universities.

(6) A claimant shall no longer be eligible for total unemployment benefits and the liability of his past employers to pay him such benefits based on his past employment shall cease for any period after he has without good cause refused to accept suitable employment when offered to him, or has failed to apply for suitable employment when notified by the district public employment office. Suitable employment shall mean either employment in his usual employment or other employment for which he is reasonably fitted, regardless of whether it is subject to this chapter: *Provided*, Such employment is in the vicinity of his residence or last employment, and gives him wages at least equal to his weekly benefit for total unemployment or provides him work for at least half the number of hours normally worked as full time in such occupation or establishment: *And provided, further*, That whenever in any specific case the commission finds that it is impracticable to apply any of the foregoing standards, the commission may apply any standard reasonably calculated to determine what is suitable employment.

(7) Nothing in this section shall require an employee to accept employment; nor shall any employee forfeit his right to benefits by refusing to accept employment under either or both of the following conditions:

(*a*) In a situation vacant in consequence of a stoppage of work due to a trade dispute;

(*b*) If the wages, hours and conditions offered be not those prevailing for similar work in the locality or are such as tend to depress wages and working conditions.

(8) No employee shall be deemed eligible to receive benefits under this chapter on account of any period of partial or total unemployment unless such employee has been a resident of Wisconsin for the 2 years preceding the beginning of such period of unemployment or has been gainfully employed in the State for 40 weeks within such 2-year period: *Provided*, That an employee's ineligibility under

this subsection shall modify his employer's benefit liability only as specifically provided in subsection (5) of section 108.06.

SEC. 108.05. *Amount of benefits.*—(1) Each eligible employee shall be paid benefits for total unemployment at a rate of $10 a week or 50 per cent of his average weekly wage, whichever is lower; except that when 50 per cent of such wage is less than $5 a benefit of $5 a week shall be paid.

(2) The benefit payable for partial unemployment in any week shall be the difference between the eligible employee's actual wages for the week and the weekly benefit to which he would be entitled if totally unemployed.

(3) Benefits shall be paid to each employee for the calendar weeks during which he is totally or partially unemployed and eligible for benefits; but no employee shall ever receive in any calendar year more than 10 weeks of benefit for total unemployment, nor more than an equivalent total amount of benefits either for partial unemployment or for partial and total unemployment combined.

(4) The amount of benefits payable to any eligible employee shall be limited also by the benefit liability of his employer's account, as provided in sections 108.06 and 108.07.

SEC. 108.06. *Benefit liability of the employer's account.*—(1) An employer's account shall be liable to pay benefits to an employee in the ratio of one week of total unemployment benefit (or an equivalent amount of partial unemployment benefit) to each four weeks of employment of such employee by such employer within the 52 weeks preceding the date on which such employee last performed services for such employer. But no liability for the payment of benefits to an employee shall accrue unless the employee has been employed more than two weeks by the particular employer within such preceding year, or, in the case of an employee employed on a fixed monthly salary, unless the employee has been employed more than one month by the particular employer within such preceding year.

(2) In no case shall an employer's account remain or be liable to pay benefits to an employee for any unemployment occurring more than six months after the date on which such employee last performed services for such employer.

(3) No employer's account shall at any time be liable to pay benefits beyond the current resources his account has, or would have if all contributions due under this chapter had been paid.

(4) The liability of any employer's account to pay benefits, for weeks of partial or total unemployment occurring within or mainly within any calendar month, may be reduced, depending on the adequacy of such account at the beginning of such month. Such adequacy shall be determined at the beginning of each month, on the basis of the net "reserve per employee" which the employer's account then has, or would have if all contributions due for payment under this chapter had been paid. (Whenever during any month the maximum benefit payable from an employer's account for any week of total unemployment is reduced hereunder, this reduced maximum shall also be observed in calculating the benefits payable from that account for partial unemployment during that month.) In each calendar month an employer's account shall be liable to pay the benefits otherwise due his eligible employees for their weeks of unemployment occurring within such month only in accordance with the following schedule:

(*a*) When its reserve at the beginning of the month amounts to $50 or more per employee, the account shall be liable for and shall pay in full all valid benefit claims for unemployment during the month;

(*b*) When such reserve amounts to over $45 but less than $50, all such valid benefit claims shall be paid, except that no eligible claimant shall receive for total unemployment a benefit of more than $9 per week;

(*c*) When such reserve amounts to over $40 but less than $45, no claimant shall receive a benefit of more than $8 per week;

(*d*) For each further periodic drop of $5 in the reserve per employee, there shall be a corresponding further drop of $1 in the maximum benefit per week payable to any claimant for total unemployment.

(5) Any employee who has neither been a resident of Wisconsin for the past 2 years nor been gainfully employed in the State for 40 weeks within such 2-year period, and who is, therefore, under subsection (8) of section 108.04 ineligible to receive benefits under this chapter, shall be known as "a nonqualified employee." Whenever such a nonqualified employee loses his employment, under conditions other than those enumerated in subsection (5) of section 108.04, his employer's account shall be at once liable to pay in lieu of benefits to such person a lump sum amount to the commission. This payment shall be made at the rate of $5 for each 4 weeks of employment of such person by such employer

during the period of employment just ended; but not more than $5 shall be so payable for each $5 reserve per employee in the employer's account at the beginning of the current calendar month. The employer's liability under this subsection shall be reported by him and shall be determined in amount in accordance with suitable rules to be prescribed by the commission. The amount found to be due shall in each such case be paid over from the employer's account into the administration fund established by section 108.20.

SEC. 108.07. *Successive employer's liability.*—(1) When an employee is employed by more than one employer within any 12-month period, the payment of benefits due such employee for total unemployment shall be made from the successive employer's accounts in inverse order to such successive employments. Until the last employer liable shall have met or been unable further to meet his benefit liability to an eligible employee no previous employer shall be due to pay benefits to such employee.

(2) When an eligible employee becomes employed in an employment or by an employer not subject to this chapter, such employment, except as provided in section 108.25, shall postpone but not terminate the liability of any former employer to pay benefits to such employee: *Provided, however,* That if the employee fails to return to regular work offered him in his former employment by the written request of his former employer, made in good faith and not inconsistent with subsection (7) of section 108.04, such employee's right to benefits from such former employer shall be extinguished.

SEC. 108.08. *Notice of unemployment.*—(1) Any claimant of benefits must give notice of his unemployment at the public employment office for the district in which he is or was last employed, within such time and in accordance with such rules as the commission may prescribe. Thereafter he shall give notice of the continuance of his unemployment as frequently and in such manner as the commission may prescribe. But the notification prescribed under this subsection may, as to any case or class of cases, be waived by the commission for good cause (including administrative feasibility), provided the commission finds that no party in interest will be prejudiced by such waiver.

(2) The commission may require from any or each employer notification of the partial or total unemployment of his employees, within such time, in such form, and in accordance with such rules as the commission may prescribe.

SEC. 108.09. *Establishment of claims.*—(1) Claims for benefits shall be filed with the superintendent of the public employment office for the district in which the claimant is or was last employed, or with a deputy of the commission designated for the purpose. Claims shall be filed within such time and in such manner as the rules of the commission may prescribe.

(2) If a claim appears to the superintendent or deputy invalid he shall reject the claim; if it appears valid he shall state the amount of benefits apparently payable to the claimant while eligible. In either case he shall notify the claimant in writing, giving his reasons. If the claimant is dissatisfied he may, within a time limit after notification to be set by the commission, have recourse to the method set up in section 108.10 for settling disputed claims.

(3) If a claim appears to the superintendent or deputy valid he shall notify the liable employer in writing of the amount of benefits apparently payable thereunder. If the employer does not contest the claim, within a time limit after notification to be set by the commission, the amount of benefits stated by the superintendent or deputy shall, subject to the limitations set up in this chapter, become payable to the claimant from such employer's account and shall be so paid by the commission. If the employer wishes to contest the claim, he may, within a time limit to be set by the commission, have recourse to the method set up in section 108.10 for settling disputed claims.

SEC. 108.10. *Method of settling disputed claims.*—(1) The manner in which disputed claims shall be presented, the reports thereon required from employers, and the conduct of hearings shall be governed by rules and regulations to be adopted by the industrial commission.

(2) Disputed claims, whether involving employers exempted under section 108.15 or those contributing to the fund, shall be decided in the first instance by the superintendent of the district public employment office or by a deputy of the commission designated for the purpose.

(3) Within a time limit after notification to be set by the commission either the employer or employee may take an appeal from any decision of the superintendent or deputy, to an appeal board to be appointed in each employment office district by the industrial commission. Such district appeal board shall consist of one

employer or representative of employers, one employee or representative of employees, and one person who is not an employer, employee or representative of either.

(4) Decisions of a district appeal board shall be reviewable by the commission or its representative upon appeal of either party within a time limit and in accordance with other rules and regulations to be laid down by the commission. The commission may authorize a commissioner or an examiner to hear such cases and to make decisions under rules to be adopted by the commission.

(5) Either party, if dissatisfied with the decision of such commissioner or examiner, may petition the industrial commission to review it as a commission. Such petition shall be in writing specifying in detail the particular errors alleged. If no such petition is filed within 10 days from the date when a copy of the decision of the commissioner or examiner was mailed to the last known address of each party in interest such decision shall be considered the decision of the industrial commission, unless set aside, reversed, or modified by such commissioner or examiner within such time. Within 10 days after the filing of any such petition the commission shall, on the basis of the evidence previously submitted in such case, affirm, reverse, set aside, or modify such decision, or direct the taking of additional testimony. Any decision made by the commission shall, if not modified or changed by it within 20 days, become the final decision of the commission and shall then be subject to judicial review on the same grounds and in the same manner as decisions of the industrial commission under the workmen's compensation act may be reviewed.

(6) The commission shall have the power to remove or transfer the proceedings pending before a commissioner or examiner; and may on its own motion set aside, modify, or change any decision, whether made by a superintendent or deputy, by a district appeal board, by a commissioner or examiner, or by the commission as a body, at any time within 20 days of the date thereof if it shall discover any mistake therein or upon the grounds of newly discovered evidence.

(7) In the discharge of their duties under this section, the superintendent of any district public employment office, any member of a district appeal board, and any member, examiner, or duly authorized employee of the industrial commission shall have power to administer oaths to persons appearing before them, and by subpoenas (served in the manner in which circuit court subpoenas are served) to compel attendance of witnesses and the production of books, papers, documents, and records necessary or convenient to be used by them in connection with any disputed claim.

(8) A full and complete record shall be kept of all proceedings in connection with a disputed claim and all testimony shall be taken down by a stenographer appointed by the commission.

SEC. 108.101. *Modified procedure.*—The commission may modify the procedure prescribed in sections 108.08, 108.09, and 108.10, with a view to such establishment and determination of claims against employers exempted under section 108.15, as will be suitable to such cases and fair to the parties in interest.

SEC. 108.11. *Agreement to contribute by employees.*—(1) No agreement by an employee or by employees to pay any portion of the contributions required under this chapter from employers shall be valid. No employer shall make a deduction for such purpose from wages. Any employee claiming a violation of this provision may, to recover wage deductions wrongfully made, have recourse to the method set up in section 108.10 for settling disputed claims.

(2) But nothing in this chapter shall affect the validity of voluntary arrangements whereby employees freely agree to make contributions to a fund for the purpose of securing unemployment compensation additional to the benefits provided in this chapter.

SEC. 108.12. *Waiver of benefit.*—No agreement by an employee to waive his right to benefits or any other rights under this chapter shall be valid.

SEC. 108.13. *Assignment.*—No claim for benefit under this chapter or under any approved voluntary unemployment benefit plan shall be assignable before payment, but this provision shall not affect the survival thereof; nor shall any claim for benefit awarded, adjudged, or paid, be subject to be taken for the debts of the party entitled thereto.

SEC. 108.14. *Administration.*—(1) This chapter shall be administered by the industrial commission.

(2) The commission shall have power and authority to adopt and enforce all rules and regulations which it finds necessary or suitable to carry out the provisions of this chapter. All such rules and regulations shall be published in the State's official newspaper and shall take effect 10 days after such publication. A copy of such rules and regulations shall be delivered to every person making

application therefor. The commission may require from employers, whether subject to this chapter or not, any reports on employment, wages, hours and related matters which it deems necessary to carry out the provisions of this chapter.

(3) The commission may appoint, employ, and pay as many persons as it deems necessary to administer and to carry out the purposes of this chapter, and may make all other expenditures of any kind which it deems necessary or suitable to this end. But it shall not pay to any member of a district appeal board more than $5 of compensation per day of services.

(4) The commission may create as many employment districts and district appeal boards and may establish and maintain as many free public employment offices as it deems necessary to carry out the provisions of this chapter. The commission shall have power to finance either partly or completely such public employment offices as it deems necessary under this chapter, from the funds appropriated to the commission for its expenses under this chapter, whether or not the political subdivision in which such office is located agrees to pay or does pay any part of the expenses of such office.

(5) The commission shall appoint advisory employment committees, by local districts or by industries or for the whole State, consisting in each case of one or more representatives each of employers, employees and the public, who shall assist the commission, without compensation but with reimbursement of necessary expenses, in administering and carrying out the purposes and provisions of this chapter.

(6) It shall be one of the purposes of this chapter to promote the regularization of employment in enterprises, localities, industries, and the State. The commission, with the advice and aid of its advisory employment committees, shall take all appropriate steps within its means to reduce and prevent unemployment. To this end the commission may employ experts, and may carry on and publish the results of any investigations and research which it deems relevant, whether or not directly related to the other purposes and specific provisions of this chapter. At least once a year the commission shall compile and publish a summary report stating the operations and status of each employer's account or other unemployment reserve and covering such other material as it deems significant in connection with the operations and purposes of this chapter.

SEC. 108.15. *Exemption.*—(1) The commission shall exempt, from the provisions of this chapter, except sections 108.12, 108.14, 108.15, 108.19, 108.21, 108.22, and 108.24, any employer who guarantees, under a plan approved by the commission, to all his eligible employees (and to each new eligible employee who is continued in employment after a probationary period of one month), in advance for a stated 1-year period, at least 42 weeks of work or wages, for at least 36 hours in each such week, if satisfied that the employer can and will make good such promise under all circumstances. The words "eligible employee" in this subsection shall mean an employee who if unemployed would not be barred from eligibility for benefits by any of paragraphs (e), (f), and (g) of subsection (5) of section 108.04 or by subsection (8) of section 108.04. But such employer shall not be required to make good such guaranty in the case of any individual employee who loses his employment under any of the conditions enumerated in subsection (5) of section 108.04.

(2) The commission shall exempt from the provisions of this chapter, except sections 108.03, 108.04, 108.07, 108.101, 108.12, 108.13, 108.14, 108.15, 108.19, 108.21, 108.22, 108.23, 108.24, 108.25, and 108.26, any employer or group of employers submitting a plan for unemployment benefits which the commission finds: (*a*) Makes eligible for benefits at least the employees who would be eligible for benefits under the compulsory features of this act; (*b*) provides that the proportion of the benefits to be financed by the employer or employers will on the whole be equal to or greater than the benefits which would be provided under the compulsory features of this act; and (*c*) is on the whole as beneficial in all other respects to such employees as the compulsory plan provided in this act. If under such a plan any contributions are made by employees, the accounts of the plan shall be so kept as to make clear what proportion of the benefits is financed by the employer or employers and what proportion by the employees. If under such a plan any contributions are made by employees, the commission may require that such employees be represented, by representatives of their own choosing, in the direct administration of such plan, and the commission may take any steps necessary and appropriate to assure such representation to contributing employees.

(3) No employer or group of employers exempted under this section shall be permitted to insure the liability to pay benefits or wages in any insurance com-

pany; and if such employer or employers enters or enter into an agreement for any form of insurance coverage such action shall automatically operate as a revocation of such exemption.

(4) As a condition of granting exemption, the commission may require the employer or group to furnish such security as the commission may deem sufficient to assure payment of all promised benefits or wages, including the setting up of proper reserves. Such reserves and other security and also the manner in which an exempted employer carries out his promises of benefits or employment shall be subject to inspection and investigation by the commission at any reasonable time. If the commission shall deem it necessary it may require an exempted employer to furnish additional security to assure fulfillment of his promises to his employees.

(5) If an exempted employer or group of employers fails to furnish security satisfactory to the commission, or fails to fulfill the promises made to employees, or willfully fails to furnish any reports that the commission may require under this chapter, or otherwise to comply with the applicable portions of this chapter and the rules, regulations, and orders of the commission pertaining to the administration thereof, the commission may, upon 10 days' notice and the opportunity to be heard, revoke the exemption of such employer or group. In such case or in case any exempted employer or group voluntarily terminates exemption, such employer or each of such group of employers shall at once pay into the fund an amount equal to the balance which would have been standing to his account had he been making the contributions to the fund and paying out the benefits provided in this chapter: *Provided*, That, in any case where such balance can not reasonably and definitely be determined, and specifically in the case of an employer exempted under subsection 1 of this section, the commission may require such employer to meet his liability under the present subsection by paying into the fund a lump-sum amount equal to the contributions he would, if not exempted, have paid into the fund under section 108.18 during the 12 months preceding termination of his exemption. The account of any employer whose exemption has been terminated shall thenceforth be liable to pay to his employees the benefits which may remain or thereafter become due them, as if such employer had not been exempted under this section; and such employer shall thenceforth pay all contributions regularly required under this chapter from nonexempted employers.

(6) Each employer exempted under this section shall be liable to make all contributions, to pay directly to employees all benefits, to pay all penalties, and otherwise to comply with all the provisions of this chapter, except as specifically provided in this section and in suitable rules to be formulated by the commission consistent with the purposes and provisions of this chapter.

(7) Such plan shall provide that upon the going out of business in this State by any employer, or the legal abandonment of the plan, the funds which shall have been contributed under such plan shall be retained for a sufficient period to meet all liability for benefits which may thereafter accrue, and that at the end of such period the proportion then remaining of employer contributions shall be released to the employer or his assigns, and the proportion then remaining of employee contributions shall be distributed in such equitable manner as the commission may approve.

(8) The rules and regulations for the government of such plan must be submitted to and approved by the commission. A plan, so approved, shall, when put into effect, constitute a contract between each employer and every other employer participating in that plan, and between the employer or employers on the one hand and on the other hand all employees who come under it; and shall not thereafter be abandoned or modified without the approval of the commission: *Provided*, That at any time after five years from and after the passage of this act the commission may, on the petition of any interested party, or on its own motion, and after public hearing, modify any such plan to conform to the standards then provided by the law for approved voluntary unemployment benefit plans.

SEC. 108.16. *Unemployment reserve funds.*—(1) For the purpose of carrying out the provisions of this chapter there is established a fund to be known as the unemployment reserve fund, to be administered by the State without liability on the part of the State beyond the amount of the fund. This fund shall consist of all contributions and moneys paid into and received by the fund pursuant to this chapter and of properties and securities acquired by and through the use of moneys belonging to the fund.

(2) A separate account shall be kept by the industrial commission with each employer contributing to said fund, and this separate employer's account shall never be merged with any other account except as provided in subsection (3) of this section.

(3) Whenever two or more employers in the same industry or locality desire to pool their several accounts with the fund, with a view to regularizing their employment by cooperative activity, they may file with the commission a written application to merge their several accounts in a new joint account with the fund. If in its judgment the plan has merit, the commission shall establish such a joint account: *Provided*, That the several employers each accept such suitable rules and regulations not inconsistent with the provisions of this chapter as may be drawn up by the commission with reference to the conduct and dissolution of such joint accounts.

(4) All contributions payable to the unemployment reserve fund shall be paid to the industrial commission, and shall daily be paid over by the commission to the State treasurer and credited to the unemployment reserve fund. Payments from said fund shall be made upon vouchers of the industrial commission. The State treasurer shall be ex officio the treasurer and custodian of the unemployment reserve fund. He shall give a separate and additional bond conditioned upon his faithful performance of these duties, in such amount as may be recommended by the industrial commission and fixed by the governor. All premiums upon the bond required pursuant to this section when furnished by an authorized surety company or by a duly constituted governmental bonding fund shall be paid from the interest earnings of the unemployment reserve fund.

(5) The unemployment reserve fund shall be invested by the annuity and investment board in the readily marketable obligations of the United States of America, of any of its 48 State governments including this State, and of any city, county, or other governmental subdivision of this State, all having a maturity of not over five years from the date of purchase. The investments of the fund shall be so made that all the assets of the fund shall always be readily convertible into cash when needed. When so directed by the industrial commission, the board shall dispose of securities belonging to the fund to secure cash needed for the payment of benefits. All expenses of the annuity and investment board in the investment of the unemployment reserve fund shall be paid from the interest earnings of said fund, as provided in subsection (1) of section 20.725.

(6) All net earnings on moneys belonging to the unemployment reserve fund shall be credited thereto, and shall, at the close of each fiscal year, be apportioned by the commission equitably to the several employers' accounts.

(7) If any employer shall become exempted under section 108.15, or shall cease to be subject to this chapter, or shall permanently go out of business in this State (except as provided in subsection (8) of this section), such employer shall, upon the expiration of six months (or prior thereto if he shall furnish surety satisfactory to the commission for the payment of benefits becoming due under this chapter during the remainder of such 6-month period), receive the balance then standing to his credit in the fund.

(8) If any employer shall transfer his business in whole or in part or shall otherwise reorganize such business, the successor in interest is hereby required to take over (in proportion to the extent of such transfer, as determined for the purposes of this chapter by the commission) the resources and liabilities of such employer's account, and to continue without interruption the payment of all contributions and benefits which would have been due for payment under this chapter in case such employer had continued in business without such transfer or reorganization.

SEC. 108.17. *Payment of contributions.*—(1) On and after the first day of July, 1933, contributions shall accrue and shall become payable by each employer then subject to this chapter in accordance with its provisions. Thereafter contributions shall accrue and become payable by any employer on and after the date on which he becomes newly subject to this chapter.

(2) All contributions required under this chapter from employers shall be paid to the industrial commission, at such times and in such manner as the commission may prescribe, except as provided otherwise in the case of employers exempted under section 108.15.

SEC. 108.18. *Contributions to reserve fund.*—The contribution regularly payable by each employer into his account with the fund shall be an amount equal to 2 per cent per annum of his pay roll. (In order that reserves shall be built up for all employees potentially eligible to benefits, "pay roll" shall include all wages, salaries, and remuneration paid to employees subject to this chapter; except that it shall not include the amount paid to an employee or officer employed on a contractual basis for a fixed period at a fixed monthly salary, which will aggregate at least $1,500 if said period is less than 12 months, or amount to at least $1,500 per annum if such period is 12 months or more, provided such contract is duly reported to the commission by the employer; nor shall it include any salary or wage

of $300 or more per month.) During an employer's first two years of contribution payments, and whenever thereafter his account amounts to less than $55 reserve per employee, the employer shall make contributions to the fund at the rate of 2 per cent per annum on his pay roll. If the employer has been continuously subject to this chapter during the two preceding years, the rate of contributions may be reduced or suspended under the following conditions:

(1) Whenever the employer's account amounts to $55 but less than $75 reserve per employee, such employer shall pay contributions to the fund at the rate of 1 per cent per annum on his pay roll.

(2) Whenever and while the employer's account has a reserve per employee of $75 or more, no contributions to the unemployment reserve fund shall be required of such employer.

SEC. 108.19. *Contributions to the administration fund.*—Each employer subject to this chapter, including every employer exempted under section 108.15, shall regularly contribute to the unemployment administration fund created in section 108.20 at the rate of two-tenths of 1 per cent per annum on his pay roll as defined in section 108.18. But the commission may prescribe at the close of any fiscal year such lower rates of contribution under this section, to apply to classes of employers throughout the ensuing fiscal year, as will in the commission's judgment adequately finance the administration of this chapter, and as will in the commission's judgment fairly represent the relative cost of the services rendered by the commission to each such class.

SEC. 108.20. *Unemployment administration fund; appropriation.*—(1) To finance the administration of this chapter and to carry out its provisions and purposes there is established the Unemployment Administration Fund. This fund shall consist of all contributions and moneys paid to the industrial commission for the administration fund as provided in subsection (5) of section 108.06, and in sections 108.19 and 108.22.

(2) All amounts received by the commission for such fund shall daily be paid over to the State treasurer and credited to the unemployment administration fund, and, as provided in section 20.573 of the statutes, are appropriated to the commission for the administration of this chapter.

SEC. 108.21. *Record and audit of pay rolls.*—Every employer, whether exempted or not, shall keep a true and accurate employment record of all his employees, whether qualified and eligible to unemployment benefits or not, and of the hours worked for him by each and of the wages paid by him to each employee, and shall furnish to the commission upon demand a sworn statement of the same. Such record shall be open to inspection by the commission or its authorized representatives at any reasonable time.

SEC. 108.22. *Default of employer.*—If any employer whether exempted or not shall default in any payment required of him under this chapter he shall become additionally liable for interest on such payment at 12 per cent per annum from the date such payment became due, such interest to be paid to the administration fund. If after due notice this payment plus interest at 12 per cent per annum is not made, it shall be collected by a civil action in the name of the State, the defaulting employer to pay the costs of such action. The payment originally due shall be paid to the commission, and credited, as may be proper in each case, either to the fund and to the defaulting employer's account or to the administration fund. The interest thus collected shall be paid to the administration fund.

SEC. 108.23. *Bankruptcy of employer.*—In the event of bankruptcy or insolvency of any employer, unpaid claims for benefits and unpaid amounts due the fund under this chapter or to a fund or reserve under any approved voluntary unemployment benefit plan shall have the same preference as is accorded in subsection (1) of section 102.28 to unpaid claims for compensation or compensation insurance.

SEC. 108.24. *Violations.*—(1) Any person who willfully makes a false statement or representation to obtain any benefit or payment under the provisions of this chapter, either for himself or for any other person, or to lower any contribution required of him, and any employer who makes a deduction from the wages of any employee in order to pay any portion of the contribution required of such employer under this chapter, shall upon conviction be deemed guilty of a misdemeanor and be punished by a fine of not less than $25 nor more than $100, or by imprisonment in the county jail not longer than 30 days, or by both such fine and imprisonment; and each such false statement and each such deduction from wages shall constitute a separate and distinct offense.

(2) Any employer who willfully refuses or fails to pay any contribution required of him under this chapter, and any person who willfully and unlawfully fails or neglects to appear or to testify or to produce books, papers, and records

as required at any hearing under this chapter, shall upon conviction be deemed guilty of a misdemeanor and be fined not less than $25 nor more than $100, or be imprisoned in the county jail not longer than 30 days, or be punished by both such fine and imprisonment; and every day of such refusal, failure, or neglect shall constitute a separate and distinct offense.

(3) On complaint of the commission the fines specified in this section may be collected by the State in an action for debt.

SEC. 108.25. *Use of unemployment reserve for public works.*—(1) If the State or any of its political subdivisions during a period of unemployment either directly or through a contractor provides work which in the opinion of the commission is an unemployment relief measure and which conforms to standards of wages and conditions prescribed by the commission, such work shall be deemed suitable employment within the meaning and subject to the limitations of subsection (6) of section 108.04: *Provided*, That an employee who accepts such work for any calendar week in which he would otherwise be totally unemployed and eligible for benefits shall be entitled to receive such benefits in the form of wages paid him for such govermental work. To this end the State or subdivision giving such work and wages to such employee in any calendar week shall receive his benefits for such week, for the purpose of partially financing such employee's work and wages on such governmental unemployment relief project.

(2) Benefits payable under this section to an employee in the form of wages from this State or a political subdivision for work on a relief project shall cease, as provided in subsection (6) of section 108.04, for any period after such employee has without good cause failed to apply for suitable employment other than such governmental work when notified, or has refused to accept suitable employment other than such governmental work when offered him.

SEC. 108.26. *Vocational education.*—When any employee is unemployed and eligible for benefits under this chapter, he may be recommended by the superintendent of the district employment office to attend vocational or other school during his unemployment. If he attends school under conditions approved by such superintendent and does satisfactory work in his classes he shall be eligible for an additional benefit of $1 per week, to be paid from the administration fund. The education shall be furnished at public expense and any fee which may customarily be charged for attendance at such classes must be paid by the town, village, or city in which such employee resides.

SEC. 108.27. *Separability of provisions.*—If any provision of this chapter, or the application thereof to any person or circumstance, is held invalid, the remainder of the chapter and the application of such provision to other persons or circumstances shall not be affected thereby.

Recommendations of Interstate Commission on Unemployment Insurance

THE report of the Interstate Commission on Unemployment Insurance that was published in February, 1932, is summarized briefly below. The commission, made up of representatives of the governors of New York, Ohio, Massachusetts, Pennsylvania, New Jersey, and Connecticut, makes its recommendations on the basis of inquiries carried on by its various subcommittees as to the problems arising in connection with the operation of unemployment insurance systems. Leo Wolman of New York acted as chairman of the committee. The other committee members were: Charles R. Blunt, New Jersey; A. Lincoln Filene, Massachusetts; C. A. Kulp, Pennsylvania; W. M. Leiserson, Ohio; and W. J. Couper, Connecticut.

Viewing the problem of unemployment as many-sided, the committee believes it is unlikely that any single measure now adopted will successfully meet the needs of unemployed persons for the duration of unemployment or that such a measure will take care of all unemployed persons. However, it is stated that the most substantial progress may be expected from a system whereby provision is made to avoid the persistent unemployment and irregularity of operation which

are so characteristic of American industry. It is further stressed that any measures proposed should combine the greatest possible simplicity in principle and practice and look forward to progressive stabilization of conditions of employment.

Recommendations

THE recommendations of the committee are as follows:

"1. The compulsory establishment of state-wide systems of unemployment reserves.

"2. The payment by each employer of a contribution amounting to 2 per cent of his pay roll.

"3. The payments made by each employer shall constitute the unemployment reserve of his firm and shall be so treated in the accounts.

"4. The maximum rate of benefit shall be 50 per cent of an employee's wage, or $10 a week, whichever is lower; and the maximum period of benefit shall be 10 weeks within any 12 months. Employees who suffer unemployment by reason of short-time employment shall be eligible for benefits whenever their week's wages are less than 60 per cent of their average weekly wage, but the benefit for partial unemployment shall not exceed the difference between the wage actually received and 60 per cent of the employee's average weekly wage. In no case, however, shall the benefit of a part-time employee exceed $10 a week.

"5. The financial responsibility of an employer shall be strictly limited by the amount of his unemployment reserve.

"6. When the accumulated reserve per employee shall exceed $50 the employer's contribution shall be reduced to 1 per cent of his pay roll; and, when the reserve has reached $75, he shall make no further contributions to the fund until the reserve again falls below $75 per employee.

"7. The State shall act as the custodian, investor, and disbursing agent of the reserve funds.

"8. The State shall take prompt steps to extend its public employment service.

"9. The unemployment authority shall create stabilization agencies.

"The most effective measures for achieving greater stabilization of employment can not obviously be accomplished by a single firm. Every effort should, therefore, be made by the unemployment administration to encourage cooperative action between firms and industries. To this end the unemployment administration should set up advisory committees of employers and employees and should have experts instructed to formulate plans to promote the regularization of employment in individual plants, localities, industries, and the State."

Discussion

THESE principles, the committee believes, combine the features on which a sound State unemployment compensation act should rest. Application of such an act is advocated for the largest possible number of employees, exclusive of agricultural workers and persons earning $200 a month or over. Inclusion of all employees who work in establishments where six or more persons are employed is recommended.

It is recognized by the committee that the proposals are extremely modest. They are intentionally so, as it is not considered sound judgment to impose an onerous burden on American industry.

With respect to the rate of contributions to unemployment funds the 2 per cent rate was recommended as a safe limit because of the strictly defined and circumscribed limitations placed upon compensable unemployment.

Adoption of a system of separate plant unemployment funds was recommended by all State representatives except Mr. Leiserson of Ohio. Mr. Leiserson was of the opinion that a system whereby contributions would be pooled might be desirable. Mr. Leiserson also recommended experiments with State unemployment insurance funds that provide for contributions from employees as well as employers.

Unemployment Insurance and Savings Plan of J. I. Case Co.

A PLAN for the creation of an individual reserve fund to be drawn upon by employees participating in the plan during periods of unemployment due to general business depression was put into effect in the plant of the J. I. Case Co. at Racine, Wis., in November, 1931. The company in outlining the purpose of the plan stated that since an industry, in order to live, must provide reserves for the usual and natural hazards of business, the employees of the industry should, likewise, make provision for the hazard of unemployment. The plan was set up by the company, therefore, to assist the employees in establishing such a reserve to protect them in case of prolonged unemployment.

The plan is applicable to all employees of the Racine factory working on an hourly or piece basis who have been in the employ of the company continuously for a period of six months and whose service has been satisfactory. Employees who, through promotion, are placed on a monthly basis may continue their contributions to the fund, although the company contributions in such cases will automatically cease.

Until a reserve equal to the average full-time earnings of each employee for six months has been created, the company and the employee will each contribute 5 per cent of the semimonthly pay, and after that the contributions in each case will amount to 2 per cent of the earnings of the employee until a reserve equal to one year's average full-time earnings has been accumulated. These contributions cease temporarily, however, whenever the employee has had less than 70 hours' work in any semimonthly pay-roll period. When the amount to the employee's credit in the fund is equivalent to one year's earnings all contributions by the employer and the employee cease until the reserve is reduced through withdrawals below this amount, after which contributions will again be made until the reserve reaches the original amount.

Although it is stated in the plan that any obligation on the part of the company for the protection of employees during business depressions is fully discharged by the company's contribution and assistance in building up the individual reserves under this plan, the company agrees to lend every reasonable assistance to conserve each employee's reserve by helping him avoid the necessity for withdrawals from the fund.

Withdrawals from the fund are permitted only during periods of business depression when the company can not furnish sufficient employment and the employee is unable to secure employment elsewhere. The withdrawals are authorized only when application is made in writing, when drafts upon the reserve are actually necessary, and after 90 days of unemployment. Payments from the fund, which are made at the regular semimonthly pay-roll dates, may not exceed 40 per cent of the average semimonthly earnings of the employee during the preceding 12 months and the amount withdrawn for any semimonthly pay period may not exceed $40. No withdrawals are allowed if an employee is receiving benefits from the employees' benefit association or under the workmen's compensation law, unless the benefits are less than 40 per cent of the average earnings, in which case the difference between the benefits and that amount may be paid. In case of permanent disability an employee may draw upon the fund up to 40 per cent of his average earnings, less any disability benefits he may receive, until his reserve is exhausted; employees who have retired on account of age, either with or without a company pension, may likewise withdraw the same amount from the fund until the reserve is exhausted. In case of death the total amount in the fund to the employee's credit is paid in semimonthly installments to the widow or dependent minor children, but in the case of payments to other beneficiaries or legal heirs the part contributed by the company and the net earnings thereon are repaid to the company.

If an employee leaves the service of the company voluntarily and remains in the State of Wisconsin, all further contributions to the fund cease but his deposits will remain in the fund until the next period of general unemployment, when he may withdraw from his reserve under the same terms as though he were still an employee. If he leaves the State, however, the amount of his deposits plus the net earnings therefrom will be returned to him after giving the company due notice of his intention to leave. In case of dismissal, the employee will receive his contribution plus the net earnings, either in semimonthly installments, if he remains in the State, or in a lump sum if he permanently gives up his residence in the State.

Extension of Health Insurance for English Unemployed Persons

THE Labor Review for March, 1931, contained a summary of the English national health insurance (prolongation of insurance) act, 1930, by virtue of which persons who, on account of prolonged unemployment, had been unable to keep up their contributions to the insurance funds, and who normally would have lost their rights to benefits under the health insurance and the contributory pensions plans, would, subject to certain conditions, retain their rights to these benefits until the end of 1931. The Ministry of Labor Gazette for December, 1931 (p. 457), states that new legislation has given a further extension of this period.

The national health insurance (prolongation of insurance) act, 1931, which received the royal assent on December 11, continues insurance until December 31, 1932, both for the persons affected by the 1930 act and also for other persons who, by reason of prolonged unemployment, would, in the absence of fresh legislation, have ceased to be insured at the end of the present year or during the course of the year 1932.

The new act further provides, as did the act of 1930, that, in order to enable approved societies to bear the additional cost of giving health insurance benefits to these persons, they are to receive a credit from the Exchequer at the rate of 36 contributions for each member who is maintained in benefit as a result of the act.

English Expenditures on Public Social Services

THE Ministry of Labor Gazette for December, 1931, gives some data from a paper recently issued by the Government showing the total expenditures (other than out of loans for capital purposes) in England and Wales and in Scotland for certain social services during the fiscal year 1929–30, and, in some cases, the estimated expenditures for 1930–31, also.

The term "expenditure" as used in the return is restricted to expenditure from (1) local rates, (2) parliamentary votes and grants, and (3) other receipts (not being receipts from loans for capital purposes) accounted for by, or to, Government departments and local authorities. The "other receipts" include, for example, in the case of education, revenue from endowments, voluntary contributions, teachers' superannuation contributions, etc.; in the case of health insurance, unemployment insurance, and widows', orphans', and old-age contributory pensions, the contributions of employers and employed; in the case of housing, rents; etc.

The following table gives the total expenditure, as thus defined:

EXPENDITURE ON PUBLIC SOCIAL SERVICES, IN GREAT BRITAIN, YEARS ENDING MARCH 31, 1930 AND 1931

Expenditure under—	England and Wales		Scotland	
	1929–30	1930–31	1929–30	1930–31
Unemployment insurance acts	£46,682,000	£88,244,000	£6,614,000	£13,281,000
National insurance (health) acts	34,710,000	35,000,000	3,860,000	3,850,000
Widows', orphans', and old-age contributory pensions acts	23,585,000	30,819,000	2,860,000	3,788,000
Old-age pension acts	31,749,000	33,376,000	4,031,000	4,176,000
War pensions acts and Ministry of Pensions acts	46,202,000	44,291,000	5,173,000	4,929,000
Education acts	86,955,000	90,355,000	13,555,000	13,943,000
Reformatory and industrial schools acts	539,000	537,000	151,000	143,000
Public health acts relating to:				
Hospitals and treatment of disease	7,376,000	----------	1,381,000	1,353,000
Maternity and child welfare work	2,370,000	----------	291,000	317,000
Housing of the working classes acts	30,879,000	----------	4,719,000	4,936,000
Acts relating to the relief of the poor	40,699,000	----------	4,254,000	3,978,000
Unemployed workmen act	40,000	----------	4,000	----------
Lunacy acts	2,421,000	----------	1,410,000	1,327,000
Mental deficiency acts	1,440,000	----------		
Total	355,647,000	----------	48,303,000	----------

The most striking feature of the table is the increase shown for 1930–31 in the amounts devoted to unemployment insurance. These figures represent the situation before the changes made in the unemployment insurance scheme in the fall of 1931, and throw no light on the present position. In England and Wales, as far as data for the two years are presented, only two items, the expenditures under the war pensions and Ministry of Pensions acts and under acts relating to reformatory and industrial schools, showed a decrease in 1930–31 as compared with 1929–30. In Scotland, however, expenditures under these two heads decreased, as did also those under the national health insurance acts, acts relating to hospitals and the treatment of disease, acts relating to the relief of the poor, and the lunacy and mental deficiency acts.

Spanish Unemployment Insurance Law Put into Operation

A SPANISH decree issued September 30, 1931, provides for the enforcement of the unemployment insurance law of May 25, 1931, according to the report from Curtis C. Jordan, American consul at Barcelona, Spain, dated October 19, 1931.

The decree provides for the creation of a National Fund for Involuntary Unemployment (*Caja Nacional Contra el Paro Forzoso*). The Spanish word "caja" is said to be difficult to translate as it means both a fund and an office and in its present use appears to combine both meanings; that is, it is an office administering a fund. The Caja is not a completely independent organization but forms a part of the National Insurance Institute.

The decree provides that the unemployment insurance office shall study the causes of unemployment and the means of reducing it and alleviating its effects, and that it shall administer the unemployment insurance fund. The board of directors includes representatives of certain Government departments, the National Insurance Institute, employers and employees, and other persons concerned with matters of public welfare and insurance. The funds of the Caja are to be secured through State appropriations, gifts, contributions from assisted insurance associations, and the income from funds or property under its own management. The Caja is authorized to assist only recognized associations for insurance against involuntary unemployment which are legally organized and which are not run for profit. The Caja works only through insurance societies and does not grant direct subsidies to unemployed workers.

All workers between the ages of 16 and 65 whose annual earnings do not exceed 6,000 pesetas [1] ($1,158) are eligible for unemployment benefits, provided they have been registered in one of the recognized associations for six months preceding the beginning of unemployment. The insurance provisions, however, do not cover State, provincial, or municipal employees, or domestic servants. Foreign workers whose countries grant reciprocal rights are eligible for unemployment benefits.

The unemployment benefits may not exceed 60 per cent of the wages normally paid in the district for the class of work customarily performed. The benefits are paid for a maximum of 60 days in any 12 consecutive months.

January 1, 1932, is set as the date of full effectiveness of the law.

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[1] Conversions into United States currency on basis of peseta=19.3 cents.

PRODUCTIVITY OF LABOR AND INDUSTRY

Use of Loading Equipment in the Bituminous-Coal Industry in 1930

THE Bureau of Mines, United States Department of Commerce, reports for 1930 a further gain in the percentage of total deep-mined coal produced by means of loading machines, pit-car loaders, and hand-loaded conveyors.[1] In comparison with 1929 it is stated that the total mechanized tonnage increased by 23.7 per cent. It is also notable that there has been an increase in tonnage loaded by all types of machines.

Increase by States

TABLE 1 shows by States the total tonnage mechanically loaded in 1929 and 1930, and the actual and percentage increase or decrease in tonnage so loaded as between the two years.

TABLE 1.—INCREASE OR DECREASE IN TOTAL TONNAGE MECHANICALLY LOADED, 1929 TO 1930

State	Amount (net tons) mechanically loaded			
	1929	1930	Increase or decrease from 1929 to 1930	
			Net tons	Per cent
Illinois	18,252,000	22,803,000	+4,551,000	+24.9
Indiana	3,274,000	3,503,000	+229,000	+7.0
Pennsylvania	4,234,000	7,035,000	+2,801,000	+66.2
Wyoming	3,002,000	2,865,000	−137,000	−4.6
Utah	920,000	862,000	−58,000	−6.3
Montana	708,000	1,115,000	+407,000	+57.5
Kentucky	812,000	989,000	+177,000	+21.8
West Virginia	2,698,000	3,079,000	−603,000	−16.4
Virginia	984,000			
Alabama	934,000	2,060,000	+1,126,000	+120.6
Other States [1]	2,044,000	2,513,000	+469,000	+22.9
Total	37,862,000	46,824,000	+8,962,000	+23.7

[1] Ohio, Washington, Arkansas, Colorado, Missouri, Oklahoma, Tennessee, Maryland, New Mexico, North Carolina, and Iowa.

As is seen, the greatest increase in mechanically loaded tonnage took place in Alabama, i. e., 120 per cent. This gain was made possible by a number of new installations, especially pit-car loaders. In calling attention to the decreases that took place, it is pointed out that the decline was largely due to a falling off in total production and that actually in many districts the per cent of output attained by mechanized mining was higher than ever before.

[1] Bituminous Coal Tables, 1930, by F. G. Tryon and L. Mann, Supplement to Weekly Coal Report, Dec. 15, 1931.

Percentage of Deep-Mined Output Produced by Mechanized Loading

THE positions of the various States as regards the percentage of total bituminous deep-mined output produced by mechanized loading in 1930 appear in Table 2.

TABLE 2.—RANK OF STATES IN PERCENTAGE OF TOTAL BITUMINOUS DEEP-MINED OUTPUT PRODUCED BY MECHANIZED LOADING IN 1930

State	Percentage loaded by machine	Percentage handled on pit-car loaders and hand-loaded conveyors	Total percentage
Montana	52.0	10.6	62.6
Wyoming	41.5	7.1	48.6
Illinois	21.2	27.1	48.3
Indiana	16.5	17.3	33.8
Utah	19.7	.5	20.2
Alabama	1.4	12.3	13.7
Pennsylvania	2.3	3.4	5.7
West Virginia and Virginia	1.7	.6	2.3
Kentucky	.9	1.1	2.0
Total, United States	5.2	5.3	10.5

According to the authors of the report under review this table serves to show that the high-wage-rate fields of the Rocky Mountains and the Middle West lead in the proportion of output produced by mechanized mining.

INDUSTRIAL AND LABOR CONDITIONS

Revival of French Canadian Handicrafts in Quebec

THE Provincial Government of Quebec has recently inaugurated a provincial school of weaving in the city of Quebec. The director of the institution has already been designated. The traditional French-Canadian handicrafts of Quebec, which for some time past have been almost abandoned, although they were regarded long ago as very successful, are at present being revived.[1] The old patterns and dyeing systems will again be used. Weaving, rug making, the making of dyes, and the fashioning by hand of artistic articles which may be easily sold to tourists are again to be taught. The plan to restore these old industrial activities has met with great encouragement, and it has become necessary to make provision for permanent headquarters for the school, which is to be located on the principal avenue in the city of Quebec.

The hope is expressed that these interesting crafts which readily appeal to the country people will be taken up by degrees in a serious manner by at least some of the 23,000 persons who, it is stated, have been sent from large cities and villages during 9 months in 1931 to the more rural districts or "land areas" of the Province. Attention is called to the fact that in the past year the government of Quebec has given a good deal of consideration to the problem of the recolonization of deserted sections. It is felt by that government that if 50 per cent of these 23,000 repatriated persons, constituting approximately 4,000 families, stay on the land, the efforts of the provincial authorities will have been worth while.

Labor Cost on Irrigated Land in Nuevo Laredo District and in Coahuila, Mexico

A REPORT from the American consul, Romeyn Wormuth, at Nuevo Laredo, Mexico, dated September 26, 1931, contained the following estimates of cost of labor for the raising of crops on irrigated land (the Don Martin irrigation project) in that consular district and in Coahuila.

[1] Report from Horatio Mocers, American consul at Quebec, Dec. 4, 1931.

ESTIMATED LABOR COST PER ACRE OF RAISING CROPS ON IRRIGATED LAND

[Conversions into United States currency on basis of peso=35 cents]

Item	Mexican currency	United States currency
	Pesos	
First plowing of land	4.00	$1.40
Harrowing, raking, and dragging	2.00	.70
Restoration and cleansing of irrigation ditches and banks	1.60	.56
First irrigation cost of labor	.30	.10½
Harrowing and raking after irrigation	2.00	.70
Seeding by machine	1.00	.35
Second irrigation	1.10	.38½
Picking by hand	2.00	.70
Collection and sorting	1.00	.35
Transport to warehouse and from warehouse to station	4.00	1.40
Total	19.00	6.65

Economic and Social Conditions in Palestine

THE 30,000 Jewish workers in Palestine are distributed as follows: 7,000 in agriculture; 4,500 in building and public works; 4,000 in factories and larger workshops; 3,000 in small workshops employing less than 7 persons; 1,500 in transport; and 10,000 in domestic service, clerical and technical employment, hospital service, etc. The above statistics are published in a report of the British Department of Overseas Trade on economic conditions in Palestine, July, 1931.

The General Federation of Jewish Labor in Palestine has a membership of 29,000, which includes the members of the cooperative agricultural settlement and their wives. It is estimated that approximately three-fourths of the Jewish workers in Palestine are trade-unionists. The percentage of Arab workers in the federation is small. Several unions of Arab workers have been organized from time to time, some of which are still in existence, but they have not been able to attract many workers and their influence has as yet been negligible in the labor market. There are no dependable figures as to the total number of Arab wage earners.

Unemployment.—The estimates of the average number of unemployed Jewish wage earners, 1926 to 1930, show that the fluctuations in the Palestine labor market were considerable in this period, the number unemployed being 6,000 in 1926, 7,400 in 1927, 2,280 in 1928, 1,000 in 1929, and 1,030 in 1930.

The greater unemployment in 1926 and 1927 was chiefly the result of the financial and economic crisis. After 1927 conditions appreciably improved, but there was another setback in the latter half of 1930.

Wages and working hours.—In general the more important industrial establishments employing Jewish and mixed labor have an 8-hour working-day. Similar hours, also, as a rule, prevail in Jewish building and agriculture. In small Jewish and Arab workshops, however, the working hours range from 8 to 10 a day, and in some cases to 11 and 12. While time rates are ordinarily paid, there are many trades in which piecework is customary. Working in permanent or temporary cooperative groups is a widespread practice among Jewish laborers, particularly in the building trades. The work is done under contract and the earnings are divided equally or in accordance with family

conditions or the individual qualifications of members. Wages paid to different classes of workers, European and Asiatic, vary substantially, notwithstanding the adoption of a scale by Jewish labor unions in various trades.

The present union wage rates per day in the more important industrial undertakings are: Skilled workers, 400 to 600 mils[1] ($1.96 to $2.94); semiskilled workers, 250 to 350 mils ($1.23 to $1.72); unskilled workers, 200 to 300 mils ($0.98 to $1.47). Union workers employed in agriculture are paid from 175 to 250 mils ($0.86 to $1.23) per day.

The wages of European laborers average approximately 100 mils (49 cents) more a day than Oriental laborers. The greater the skill and experience required, the less the difference in the wages of workers from various countries. Female workers are ordinarily employed in the textile and clothing industries and in the making of cigarettes, cardboard boxes, and artificial teeth. The earnings of these women are less than those of male workers in the same trades.

Protection of labor.—Protective and regulatory labor legislation in Palestine includes—

(*a*) Regulations concerning minimum age of employment, duration of work of children, nightwork, employment of women and children in dangerous industries, etc.
(*b*) Workmen's compensation ordinance.
(*c*) Fencing of dangerous machinery ordinance.
(*d*) Ordinance to provide for the safety and inspection of steam boilers and prime movers.
(*e*) Prevention of intimidation ordinance, with special relation to labor disputes.
(*f*) White phosphorus prohibition ordinance.

Palestine is an adherent to the international convention concerning the equality of treatment for national and foreign workers with reference to accident compensation.

Of the 33,590 immigrants to Palestine in the 5-year period 1926–1930, 28,165 were Jews. Of the 25,395 immigrants from that country in the same period, 18,029 were Jews.

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[1] Conversions into United States currency made on basis of mil=about 49 cents.

CHILD LABOR

Child-Labor Trends in New York

WHAT effect has an industrial depression upon the employment of children? Does the increasing need of their families make it necessary for them to become wage earners in the place of their unemployed elders, or does the prevailing slackness cut down opportunities for them also, and diminish the number of young workers? The division of women in industry of the New York Department of Labor, which has for some years been watching the trend of child labor in the State, publishes in the Industrial Bulletin of the department for January, 1932, some data bearing upon the question.

Three different sets of statistics may be looked upon as giving some indication of the extent of child labor—the number of employment certificates issued to children, the number of children attending school, and the number of child-labor violations found. Of these, the number of work certificates is first considered. Under the New York law, children aged 14 and under 16 must have an employment certificate testifying to the completion of certain grades of school work before they may be legally employed. Since 1925, children aged 16 and under 17 must also have a certificate testifying to physical fitness and giving proof of age. Up to March, 1928, this requirement applied only in cities with a population of 5,000 or more, but since then it has been in force throughout the State.

Employment Certificates Issued

THE number of regular work certificates issued to children under 16 is given for each year from 1910 to 1930, inclusive, and the number to children aged 16 and under 18, from 1925 onward. The following table gives these data, both for New York City and for the rest of the State, from 1918 to 1930, inclusive:

EMPLOYMENT CERTIFICATES ISSUED YEARLY IN NEW YORK, 1918 TO 1930

Year	New York City		Outside New York City	
	To children aged 14 and under 16	To children aged 16 and under 17	To children aged 14 and under 16	To children aged 16 and under 17
1918	50,710		16,039	
1919	49,294		16,587	
1920	50,675		20,126	
1921	38,889		13,123	
1922	32,492		11,159	
1923	36,518		18,467	
1924	32,162		16,062	
1925	32,814	7,376	16,132	
1926	35,538	12,609	18,289	11,984
1927	35,717	12,226	17,787	11,096
1928	34,313	12,820	17,298	8,155
1929	35,934	18,841	18,957	10,751
1930	27,319	15,014	16,259	8,845

The continuation-school law which went into effect in 1920 undoubtedly had much to do with the decided drop in the number of regular employment certificates which followed. The decrease, which continued through 1922, is also to be attributed in part to the law (effective 1921) requiring a pledge of employment before a child could secure a regular employment certificate. Before this specific offer of employment was required, it is probable that many children applied for certificates who were afterward unable to find jobs, or who wished to leave school and had no intention of working regularly.

Since 1922 the number of regular employment certificates issued to children from 14 to 16 years in New York City has fluctuated between 32,000 and more than 36,000 until 1930, when the number dropped to 27,319, a decrease of 24 per cent from the previous year. Thus in the depression year there was a sharp drop in the number of work certificates issued, seeming to indicate a decline in child labor since it can not be accounted for by any change in law or enforcement. There was also a marked decrease in the number of certificates issued to 16-year-olds in New York City in 1930. Certificates have been issued to children of this age since 1925 and in New York City showed an increase from 12,609 issued in 1926, the first full year, to 18,841 in 1929. In 1930, however, only 15,014 such certificates were issued, a decrease of 20 per cent from 1929.

Outside of New York City the number of certificates issued also showed a decrease in 1930 although it was not as marked. Employment certificates issued to children between 14 and 16 years of age dropped from 18,957 to 16,259, or 14 per cent; those issued to 16-year-old children from 10,751 to 8,845, or 18 per cent.

The number of vacation permits issued in 1930 showed an even greater decline. In New York City, for children of 14 and 15, these dropped from 13,698 in 1929 to 9,981 in 1930, a decrease of 27 per cent; for those aged 16 the fall was from 2,844 to 2,194, a decline of approximately 23 per cent. Outside of New York City the falling off in the total number of vacation permits issued amounted to 26 per cent.

School Attendance

ATTENDANCE at the regular school sessions in New York is compulsory on all children under 14 and on all between 14 and 16 who are not employed. Changes in elementary-school attendance, therefore, represent, in the main, changes in the population of elementary-school age. There appears, however, to be a tendency to remain in school to a higher age than was formerly the custom.

According to a report by the New York Child Labor Committee, "What the new York child labor law has accomplished," there was a definite trend toward a later school leaving in New York State in the five years from 1922 to 1926. In 1922, 73 per cent of the regular employment certificates issued to children under 16 were to 15-year-olds; by 1926 the proportion had increased to 80 per cent. That only one-fifth of the children under 16 who began work in 1926 did so while they were 14 years old is attributed to the law requiring that 14-year-old children must be elementary-school graduates before they can go to work. In effect the law is operating more and more to make 15 years the practical minimum for leaving school.

Attendance in high school is not compulsory, so that any increase in the number registered indicates a voluntary extension of the period devoted to education and, broadly speaking, a decline in the volume of child labor. The following table shows the changes in high-school attendance, both for the State as a whole and for New York City, from 1918 to 1930, inclusive:

CHANGES IN HIGH-SCHOOL ATTENDANCE IN NEW YORK, 1918 TO 1930

Year	New York State		New York City	
	Number attending	Increase over previous year	Number attending	Increase over previous year
		Per cent		*Per cent*
1918	171,523	1.1	85,136	1.7
1919	172,516	.6	83,692	[1] 1.7
1920	184,753	7.1	87,167	4.2
1921	200,364	8.4	86,881	[1] .3
1922	242,072	20.8	105,193	21.1
1923	271,299	12.1	118,314	12.0
1924	290,511	7.1	103,108	[1] 12.9
1925	302,211	4.0	113,538	10.1
1926	321,916	6.5	125,201	10.3
1927	349,709	8.6	131,038	4.7
1928	354,326	1.3	138,977	6.1
1929	379,912	7.2	149,366	7.5
1930	420,310	10.6	159,832	7.0

[1] Decrease.

The marked increases in attendance in 1922 and 1923 are ascribed to changes in the education law, but no such explanation is available for the increases in the following years, nor for the position in 1930. For the State as a whole the increase in that year was greater than for any year since the changes in the law went into effect, while in New York City, though the increase over the previous year was not so marked the number enrolled was greater by over 41,000 than it had been in 1923 and more than 10,000 greater than in 1929. "With fewer jobs available it is apparent that larger numbers of children are going on to high school."

Child-Labor Violations

CHANGES in tne number of children found illegally employed form a less satisfactory index of the extent of child labor than either of the other two, since they may be due mainly to changes in the labor law or in the method of enforcing it. The total number of children found illegally employed reached 6,896 in 1920, fell to 5,533 in 1921, and thereafter remained below 5,000 until 1929, when it reached 5,076. In 1930 it fell to 3,804, a decrease of 25 per cent. The decrease appeared in every type of violation, except in the illegal employment of children under 17 on tenement home work, which rose from 151 to 193. It is suggested that this increase, which had appeared even more markedly in the preceding year, was due to the fact that the time of inspection had been changed to a later hour, when the children were at home from school.

Conclusion

EACH of the three indexes of the trend of child labor, employment certificate, school attendance, and inspection records, has indicated a decrease in child labor during the depression years. Similar statistics for the next few years will be of especial interest in showing whether this represents a permanent decline in child labor or merely a temporary fluctuation due to scarcity of jobs.

HEALTH AND INDUSTRIAL HYGIENE

Health of Insured Wage Earners During 1931

THE report of the Metropolitan Life Insurance Co. concerning the health record in 1931 of the millions of insured wage earners in the United States and Canada[1] shows that the record for the year was the most remarkable of all time. While the death rate was not at the absolute minimum, it exceeded the previous minimum by only 1 per cent and this in spite of the most severe industrial depression of a generation lasting throughout the year and an epidemic of influenza during the first quarter of the year. For certain sections of the country the rate was much lower, as among approximately 1,100,000 insured persons in the Pacific Coast and Mountain States the mortality was 4.1 per cent below the previous low point and in Canada 7.3 per cent below. For the locality east of the Rockies, where the great majority of the policyholders live, the mortality was 1.2 per cent higher. From these figures it is apparent that the economic conditions have not yet had any appreciable ill effect upon the public health.

The health outlook at the beginning of 1931 was far from favorable, as the depression of 1930 was becoming progressively worse, with the number of unemployed workers increasing in practically every industry. No part of the country was exempt from the unfavorable business conditions, and thousands of families who had never before felt actual want had to face that condition. Such conditions were not conducive to good health and a low death rate. The epidemic of influenza and pneumonia which began in January and caused a pronounced rise in sickness and mortality covered the entire country, with especially large increases in mortality from this cause along the Atlantic seaboard. In February there was a sharp rise in the influenza death rate and an accompanying rise in the mortality from the principal "degenerative" diseases, so that the indications for the first quarter of the year were that 1931 would be a year showing mortality rates above the average. Conditions in April, however, improved so markedly that the death rate was one of the lowest for that month ever recorded for the policyholders of the company, and this trend continued for the remainder of the year.

In spite of the favorable showing for the year, however, it is questionable how long the depression can continue without causing an appreciable rise in the death rate. As the depression was preceded by a long period of good employment at high wages, many persons had been able to save money which carried them over the first of the depression. But as savings accounts become exhausted the full effect of the depression may be expected to appear. These effects have been retarded, also, by the unusual amount of help given by relief organizations and health agencies, and another factor has been the restriction of the diet to less and plainer food, which probably

[1] Metropolitan Life Insurance Co. Statistical Bulletin, January, 1932.

in many cases has made for better health. However, the report states, there is no justification for the belief that hard times and good health go together, and it is important, therefore, that every vital public health activity should be continued so that the public may be protected against the ill effects usually following long periods of unemployment.

In 1931 the death rate of insured persons was 8.46 per 1,000 as compared with a rate of 12.53 per 1,000 in 1911. The actual number of deaths among the policyholders aged 1 year and over was 148,297. If the 1911 death rate had prevailed last year there would have been 219,596 deaths, so that the decline in mortality during the last 20 years resulted in the saving of 71,299 lives in the year 1931 alone. Since 1911-12 the reduction in the death rate has resulted in extending the life expectancy of insured wage earners 10.73 years. In comparison with the mortality rates for the general population a much greater improvement is shown for the industrial group. The latest available mortality figures for the general population are for 1930. In that year the mortality rate had declined only 12.1 per cent as compared with 1911, while the drop among the insured group was 33.2 per cent. In 1911 the death rate among the wage earners exceeded that of the general population by 24.3 per cent, while in 1930 the crude mortality rate of the insured wage earners was 3.3 per cent lower than that of the general population of comparable ages. This saving in lives has amounted to more than 400,000 in the period since 1911, when the welfare work of the Metropolitan began. Twenty years ago the expectation of life was about 6½ years more favorable in the general population than among the insured group, but by 1929 it had been reduced to a little less than three years. Lower rates than ever before were recorded for six diseases, all of great public-health importance, namely, tuberculosis, diphtheria, whooping cough, pneumonia, diarrheal complaints, and puerperal conditions, and for two types of accidental death—railroad accidents and accidental burns. The figures for typhoid fever and for machinery accidents were identical with minimum rates previously established.

The greatest single achievement during the year was a further reduction of 5.7 per cent in the mortality from tuberculosis. This is the more remarkable as it is the very last disease from which, under the prevailing economic conditions, we should expect a reduction in the death rate. The actual death rate was 76.7 per 100,000, which is 65.9 per cent below that for 1911 and 44.4 per cent below that for 1920. While tuberculosis has declined during these years among every element of the population, the greatest gain has been among the wage earners, although in spite of this fact it is still third among the causes of death.

The death rates for all four of the principal communicable diseases were low in 1931, a new minimum being established for diphtheria and whooping cough. A drop of 24.6 per cent for diphtheria was recorded in one year and of 50 per cent in two years. The death rate of 4 per 100,000 is regarded as inexcusable, however, since by immunization it is possible to stamp it out altogether. The new record in the mortality rate from whooping cough was 1.7 per 100,000.

The establishment of a new minimum rate for pneumonia was unexpected in a year in which there was a widespread epidemic of

influenza, but even during the epidemic it was noted that the mortality from pneumonia did not rise as sharply as in former influenza outbreaks.

Improvement in community sanitation, partly due to the company's program of health education among the insured and partly the result of the efforts of other agencies in protecting food and milk supplies, has resulted in the pronounced downward tendency in the mortality rate from diarrhea and enteritis.

The death rate for diseases of pregnancy and childbirth established a new minimum of 11.9 per 100,000 in 1931—a reduction of 3.3 per cent from the previous low rate recorded in 1930. The downward trend of mortality from these diseases among insured women has been steady for the past decade.

Accidental burns and injuries sustained in railroad accidents were, respectively, 16 and 7 per cent below the previous minimum rates. Lower mortality rates than in 1930 were shown for alcoholism and chronic nephritis.

New high death rates, on the other hand, were shown for cancer, diseases of the heart, diabetes, and automobile accidents. The rate for cancer increased 7.4 per cent over the 1930 rate and was nearly 26 per cent higher than the rate for 1911. This increase takes first place among the unfavorable developments for the year. Organic heart disease was responsible for 18 out of every 100 deaths among the policyholders in 1931. Although, since 1922, heart disease has been the leading cause of death among policyholders, the rate is increasing at the older ages only, and there is a pronounced downward tendency among children and young adults. The mortality from diabetes rose 14.4 per cent in 1931, which established a new maximum. This increase has taken place particularly among women, and at ages beyond 45, the mortality having been markedly decreased at all ages under 45.

Automobile fatalities increased more than 5 per cent in 1931 among wage earners, and it is estimated that not less than 34,000 people lost their lives in motor-vehicle accidents in 1931. The death rate from alcoholism declined to 2.9 per 100,000, a reduction of 9.4 per cent from the 1930 rate, but mortality from cirrhosis of the liver, which is largely of alcoholic origin, increased 7.3 per cent in the same period.

Poliomyelitis (infantile paralysis) was responsible for a death rate of 2.6 per 100,000. This was the most extensive epidemic since 1916, but the case fatality rate was much lower than in the former epidemic and there was a lower incidence of cripplings in 1931.

INDUSTRIAL ACCIDENTS AND SAFETY

New Safety Code for Elevators

A REVISED safety code for elevators, dumb-waiters, and escalators has been completed after four years of research at the United States Bureau of Standards and an extensive investigation by a technical committee, representative of building, manufacturing, insurance, and governmental organizations, followed by approval of the American Standards Association.

The form and arrangements of the 1925 code have been followed closely, but a considerable amount of new material has been added, to cover the new developments in elevator construction as a result of the constant demand for increased speed. The difficulty of stopping rapidly moving elevators at floor levels necessitated automatic operation with automatic floor leveling devices where the speed exceeded 700 feet per minute. This required new types of control and additional measures to provide reasonable safety for life and limb.

The research work developed a redesign of practically all elevator buffers, and resulted in the inclusion in the code of test specifications for these devices, for terminal stops, interlocks, and safeties.

The difficulties created by the excessive space required for elevators in modern skyscrapers has been recognized, and the code permits, for the first time, the use of two-story elevators under certain, specified conditions, to serve two floors at the same time. One operator is required for each cage, and it must not be possible to move the elevator unless both doors are closed. It also points out that it may soon be necessary to consider the use of two single elevators in the same elevator shaft, and the necessary provisions to make such procedure reasonably safe.

It is strongly recommended that all elevator-shaft inclosures be of fire-resistant construction, especially in the modern tall buildings, where they are the principal, and often the only, practical means of exit in case of fire.

Provisions are also included for the safe operation of freight and other types of elevators, passenger-operated elevators, dumb-waiters, and escalators.

The code is intended as a guide to State and municipal authorities in drafting regulations, as a standard reference to safety requirements for the use of elevator manufacturers, architects, and consulting engineers, and as a standard of operating practice for users of elevators. According to advice from the American Standards Association it has been adopted practically in verbatim form by the city of New York.

Coal-Mine Fatalities in the United States in 1929

THE death rate per thousand 300-day workers in coal mines during 1929 was 4.54, or 2 per cent less than in 1928, according to the report of the United States Bureau of Mines on coal-mine fatalities in the United States in 1929, published as its Bulletin 341. The number

of deaths per million tons of coal produced declined even more, from 3.78 in 1928 to 3.59 in 1929, a decrease of 5 per cent. The actual number of deaths during 1929 was 2,187, or 11 more than reported for 1928, but as the mines were in operation for 221 days, or 15 days more than in the preceding year, the number of man-days worked increased from 140,604,141 in 1928 to 144,463,453 in 1929, with a consequent reduction in fatality rate.

An all-time record in the average daily productivity of coal miners was established in 1929. The average output of coal per man per day rose to 4.21 tons, as compared with 4.10 tons per day for 1928, the previous maximum production. The total production in 1929 was 608,816,788 short tons. The average number of days worked per man during the year was 221 as compared with 206 in 1928.

The Bureau of Mines does not collect statistics for nonfatal injuries in coal mines, but an estimate is published for 1929 of 85,000 nonfatal lost-time injuries at bituminous coal mines, and 35,000 nonfatal lost-time injuries at anthracite mines, a total of 120,000 nonfatal injuries for the industry.

Table 1 shows the number of workers employed, days worked, number of fatalities, and production per man, by 5-year periods from 1906 to 1925, and by years, 1926 to 1929.

TABLE 1.—NUMBER OF WORKERS, NUMBER OF FATALITIES, AND PRODUCTION IN COAL MINES, 1906 TO 1929

Period or year	Men employed		Average days active	Men killed		Production per death (short tons)	Average production per man		Deaths per million tons
	Actual number	Equivalent in 300-day workers		Number	Rate per 1,000 300-day workers		Tons per year	Tons per day	
1906–1910 (average) [1]	675,067	484,454	215	2,658	5.49	169,719	668	3.10	5.89
1911–1915 (average)	739,169	541,489	220	2,517	4.65	210,253	716	3.26	4.76
1916–1920 (average)	760,381	599,781	237	2,419	4.03	258,944	824	3.48	3.86
1921–1925 (average)	811,803	484,071	179	2,215	4.58	252,346	689	3.85	3.96
1926	759,033	559,426	221	2,518	4.50	261,241	867	3.92	3.83
1927	759,177	503,065	199	2,231	4.43	267,978	788	3.96	3.73
1928	682,831	468,680	206	2,176	4.64	264,749	844	4.10	3.78
1929	654,494	481,545	221	2,187	4.54	278,380	930	4.21	3.59

[1] Figures for 1906 to 1909, inclusive, are only for States under inspection service. Figures for 1909 as to average days active were estimated by the Bureau of Mines.

There were 2,047 underground fatalities and 111 surface accidents in 1929. Falls of roof or face accounted for 1,182 of the underground deaths. The next largest number of fatalities underground was due to mine cars and locomotives (413 deaths), followed by major explosions of gas or coal dust (145 deaths).

The difference in fatality rates for bituminous mines and anthracite mines is shown in Table 2, which contains rates for each type and for both types combined, by 5-year periods from 1891 to 1925, and by years, 1926 to 1929.

TABLE 2.—FATALITY RATES FOR COAL MINES, 1891 TO 1929[1]

[Includes underground and surface accidents]

Period or year	Fatality rates in—								
	Bituminous mines			Anthracite mines			All mines		
	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined
1891–1895 (average)	2.69	4.02	4.84	3.27	4.99	8.12	2.91	4.38	5.87
1896–1900 (average)	2.90	4.06	4.46	3.03	5.58	7.94	2.95	4.50	5.34
1901–1905 (average)	3.49	4.81	5.17	3.36	5.38	7.69	3.45	4.95	5.67
1906–1910 (average)	4.01	5.57	5.50	3.70	5.25	7.67	3.94	5.48	5.89
1911–1915 (average)	3.27	4.75	4.31	3.52	4.37	6.95	3.40	4.65	4.76
1916–1920 (average)	3.05	4.03	3.48	3.70	4.06	6.07	3.18	4.03	3.86
1921–1925 (average)	2.70	4.87	3.67	2.83	3.71	5.80	2.73	4.58	3.96
1926	3.48	4.86	3.60	2.74	3.37	5.36	3.32	4.50	3.83
1927	2.93	4.60	3.36	2.96	3.94	6.11	2.94	4.43	3.73
1928	3.31	4.90	3.45	2.78	3.85	5.93	3.19	4.64	3.78
1929	3.39	4.63	3.19	3.18	4.24	6.53	3.34	4.54	3.59

[1] Prior to 1910 certain States did not maintain records of accidents. The above rates are based exclusively on tonnage and men employed in States for which accident records are available.

Reports furnished to the Bureau of Mines showed that 75 per cent of the bituminous-coal mines that produced coal in 1929 were operated on the basis of 8 hours per day, and that these 8-hour mines employed 90 per cent of all persons who worked at bituminous-coal mines during the year. Four per cent of the mines, employing about 7 per cent of the total workers, were on a 9-hour basis, and less than 1 per cent of the mines, employing less than 1 per cent of the workers, were on a 10-hour basis. All workers in the anthracite mines of Pennsylvania were employed at 8-hour mines.

Metal-Mine Accidents in the United States, 1929

THE death rate from accidents in metal and nonmetallic mineral mines, except coal mines, for 1929 was 3.03 per thousand 300-day workers, according to the report of the United States Bureau of Mines on metal-mine accidents in the United States for 1929, published as its Bulletin 342. This was 21 per cent higher than the unusually low rate for 1928 (2.50), but lower than for all other years except 1923 and 1925. The nonfatal lost-time injury rate was 200.11 for 1929, 3 per cent less than for 1928 (205.61), and lower than for any year since 1913. Published figures for 1911, 1912, and 1913, the earliest years for which annual statistics were collected, indicate lower rates, but the Bureau of Mines believes this is probably due to incomplete reports from the mine owners during those years.

The total number of workers was 118,735 in 1929, as compared with 113,866 in 1928, and the average number of days worked per man was 292 in 1929, as against 288 in 1928, making the total number of days worked 34,618,120 in 1929 as compared with 32,803,610 in 1928. The actual number of workers killed in 1929 was 350, or 77 more than in 1928, while the actual number of lost-time injuries was 23,092 in 1929, or 609 more than in 1928.

As compared with 1928, the death rate for 1929 per thousand 300-day workers increased 20 per cent in underground mining operations

and 78 per cent in open-cut mining operations, but declined 3 per cent for workers in surface shops and yards. The nonfatal injury rate increased 19 per cent in open-cut mining operations, but was reduced 4 per cent in underground mining operations and 11 per cent for workers in surface shops and yards.

The principal cause of fatal accidents was, as usual, fall of rock from the roof or wall, which was also the outstanding cause of nonfatal injuries. Other prominent causes of fatalities, in the order of their importance and by location of operations, were explosives, haulage, and falls of persons in underground accidents; skip, cage, or bucket, and falling down shaft in shaft accidents; falls of persons in surface accidents; and falls or slides of rock in open-pit accidents.

In nonfatal injuries other principal causes underground were fall of rock, loading ore at the working face, haulage, timber or hand tools, and drilling. Falling objects and accidents connected with the skip, cage, or bucket were the chief causes in the shaft; while hand tools, falls of persons, machinery, and mine cars were mainly responsible for surface accidents; and handling materials, falls or slides of rock or ore, falls of persons, haulage, and hand tools predominated in open-pit accidents.

The table following shows the number of workers employed, the number killed and injured, and fatal and nonfatal injury rates in the different groups of metal mines and in nonmetallic mineral mines in 1929 compared with 1928.

EMPLOYMENT AND ACCIDENTS IN DIFFERENT TYPES OF METAL MINES AND IN NONMETALLIC MINERAL MINES (EXCEPT COAL), 1928 AND 1929

Year, and type of mine	Men employed		Average days active	Men killed		Men injured	
	Actual number	Equivalent in 300-day workers		Number	Rate per 1,000 300-day workers	Number	Rate per 1,000 300-day workers
1928							
Copper	30,561	33,002	324	100	3.03	7,293	220.99
Gold, silver, and miscellaneous metal	31,622	30,441	289	79	2.60	8,180	268.72
Iron	29,145	25,956	267	56	2.16	2,547	98.13
Lead and zinc (Mississippi Valley)	10,334	8,659	251	14	1.62	2,560	295.65
Nonmetallic mineral	12,204	11,287	277	24	2.13	1,903	168.60
Total	113,866	109,345	288	273	2.50	22,483	205.61
1929							
Copper	37,147	39,946	323	121	3.03	8,941	223.83
Gold, silver, and miscellaneous metal	30,861	28,995	282	106	3.66	7,810	269.36
Iron	28,219	26,837	285	80	2.98	2,404	89.58
Lead and zinc (Mississippi Valley)	11,177	9,119	245	19	2.08	2,173	238.29
Nonmetallic mineral	11,331	10,497	278	24	2.29	1,764	168.05
Total	118,735	115,394	292	350	3.03	23,092	200.11

Accidents at Metallurgical Works in the United States in 1929

ACCORDING to the report of the United States Bureau of Mines on accidents at metallurgical works in the United States during 1929,[1] the death rates per thousand 300-day workers for 1929, as compared with 1928, were 2 per cent lower for ore-dressing plants and 41 per cent lower for auxiliary works, but 16 per cent higher for smelting plants, exclusive of blast furnaces. The nonfatal injury rates per thousand 300-day workers for 1929, as compared with 1928, were 12 per cent lower for ore-dressing plants and 4 per cent lower for smelting plants, exclusive of blast furnaces, but 3 per cent higher for auxiliary plants.

Combined figures for all three classes of plants show a death rate of 0.80 and a nonfatal injury rate of 85.38 per thousand 300-day workers for 1929, as compared with a death rate of 0.84 and a nonfatal injury rate of 88.36 for 1928.

The table following shows the number of workers employed, the number killed and injured, and fatal and nonfatal accident rates in each of the three groups of plants for 1928 and 1929.

EMPLOYMENT AND ACCIDENTS AT METALLURGICAL PLANTS IN THE UNITED STATES, 1928 AND 1929

Group and year	Men employed		Average days active	Men killed		Men injured	
	Actual number	Equivalent in 300-day workers		Number	Rate per 1,000 300-day workers	Number	Rate per 1,000 300-day workers
Ore-dressing plants:							
1928	11,758	12,357	315	15	1.21	1,437	116.29
1929	13,721	14,266	312	17	1.19	1,460	102.34
Smelting plants:							
1928	20,393	24,310	358	18	.74	1,906	78.40
1929	18,603	22,222	358	19	.86	1,679	75.56
Auxiliary works:							
1928	13,544	16,001	354	11	.69	1,311	81.93
1929	15,075	17,099	340	7	.41	1,436	83.98

[1] United States. Department of Commerce. Bureau of Mines. Technical paper 503: Accidents at metallurgical works in the United States during the calendar year 1929, by William W. Adams. Washington, 1931.

COOPERATION

Directory of Consumers' Cooperative Societies

THE Bureau of Labor Statistics has just issued, in mimeographed form, a list of 1,800 consumers' cooperative societies in the United States. It includes store societies, bakeries, consumers' creamery organizations, coal yards, gasoline filling stations, restaurants, hotels, rooming and boarding houses, housing societies, insurance associations, garages, laundries, burial associations, wholesale societies, etc., together with a key to show in just what line of business the society engages.

The list is not complete, as there are doubtless many societies of whose existence the bureau is not aware. Likewise it does not include a number of societies which requested that their names be omitted. As the bureau has had no opportunity since early in 1930 to revise the entire list, it is likely that it includes some societies which have discontinued operations since that time. The bureau will appreciate being informed of any active societies not given here, as well as of any that have gone out of business.

Copies of the directory may be obtained on application to the bureau.

Establishment of First International Cooperative Factory

THE first step in cooperative production on an international basis was taken recently when a factory was opened up for the manufacture of electric-light bulbs. Cooperative Information (Geneva), No. 15 (128), 1931, contains a description of this enterprise.

The factory was set up in opposition to an international trust, or "cartel," which controlled the market in a number of countries and whose price policies were considered arbitrary and oppressive.

With the Swedish Cooperative Union taking the initiative, the cooperative factory, occupying an area of 43,000 square meters, was built just outside Stockholm. The demand for the product soon outran the capacity, and an addition to the plant is now being planned.

Since the erection of the factory, the trust's price has fallen in successive stages from 1.35 kronor to 0.85 krona, the price of the cooperative lamp—a total drop of 37 per cent.

Although the Swedish Cooperative Union was the prime mover in the new enterprise and furnished much of the capital, the factory is owned by an international association called Kooperativa Lumaförbundet, membership in which is open to the organized consumers' cooperative movement of any country. The present membership includes the central cooperative unions of Sweden, Denmark, and Norway, and both the cooperative wholesale societies of Finland.

LABOR LAWS AND COURT DECISIONS

Railroad Held Not Liable for Injury Caused by Porter Handling Mail Sacks

THE work of handling mails, done by men furnished by railroads under postal regulations, is Government work and the railroads are relieved from liability for injury caused by employees while engaged in such work, according to the decision of the United States Supreme Court in the case of Denton *v.* Yazoo & M. V. R. Co. et al. (52 Sup. Ct. 141).

Jesse H. Denton, a United States railway postal clerk, sustained an injury due to the alleged negligence of one Hunter, a porter in the general service of the Yazoo & Mississippi Valley Railroad Co. and the Illinois Central Railroad Co. At the time of the injury Hunter was loading United States mail into a mail car, under the direction of a United States postal transfer clerk, and was not, while engaged in such work, under the direction or control of either of the railroad companies. The work was done as required by statute (39 Stat. 412) and the railroad companies furnished the men necessary to handle the mail.

Denton brought action in a Mississippi court to recover damages against Hunter and the two railroad companies, and a judgment was entered against all three defendants. The Mississippi Supreme Court, however, reversed the judgment as to the railroad companies on the ground that "what Hunter was doing at the time of his alleged negligent act was not for them but for the United States." Thereupon the case was carried to the United States Supreme Court for review.

Mr. Justice Sutherland, in rendering the opinion for the court, laid down the following for determining whether the railroad companies were liable:

> Whether the railroad companies may be held liable for Hunter's act depends not upon the fact that he was their servant generally, but upon whether the work which he was doing at the time was their work or that of another; a question determined, usually at least, by ascertaining under whose authority and command the work was being done. When one person puts his servant at the disposal and under the control of another for the performance of a particular service for the latter, the servant, in respect of his acts in that service, is to be dealt with as the servant of the latter and not of the former. This rule is elementary and finds support in a large number of decisions.

The prior decision of the court in Standard Oil Co. *v.* Anderson (29 Sup. Ct. 252; 212 U. S. 215) was discussed and quoted in part and the case of Driscoll *v.* Towle (63 N. E. 922), relied on to sustain the judgment of the lower court, was also discussed. The court, however, found "the facts of the present case require a different conclusion," and in affirming the judgment of the Mississippi Supreme Court relieving the railroad companies from liability, said, in part, as follows:

> The statutory obligation imposed upon the railroad carriers is simply to transport mail offered for transportation by the United States. They are not required to handle, load, or receive mail matter, but only to furnish the men necessary for

those purposes. The men so furnished handle the mails and load them into, and receive them from, the railway post-office cars, as the regulation prescribes, "under the direction of the transfer clerk, or clerk in charge of the car." The work they do is that of the Government.

New York Provision as to Determination of Fact by State Board Upheld

THE United States Supreme Court in a memorandum decision on January 18, 1932, affirmed a judgment of the appellate division of the Supreme Court of the State of New York involving the validity of section 20 of the New York workmen's compensation law, which provides that the determination of the State industrial board on questions of fact shall be final. (Dahlstrom Metallic Door Co. et al. *v.* Industrial Board of the State of New York, 52 Sup. Ct. 202.)

The decision in this case is of far-reaching importance because in addition to New York, the statutes of several other States, particularly California, Idaho, Oklahoma, and Utah, have similar provisions in their workmen's compensation laws.

The United States Supreme Court affirmed the New York Court of Appeals without a written opinion, basing the judgment upon two former cases decided by the United States Supreme Court, namely, New York Central Railroad Co. *v.* White, 243 U. S. 188, and Mountain Timber Co. *v.* Washington, 243 U. S. 219.[1]

Section 20 of the New York workmen's compensation act was attacked on the ground that the failure to provide for a judicial review of the facts denied due process of law in violation of the fourteenth amendment to the Federal Constitution. It was contended that the industrial board is an administrative or executive tribunal, and that "there is no rule for absolute finality of executive determination" in support of a claim that the employer was entitled under the Federal Constitution to a judicial review of the facts in a case brought before the industrial board. The State, on the other hand, argued that, under the New York compensation law and by construction placed upon the act by the various New York courts, adequate protection was afforded in proceedings before the industrial board and by judicial review in the courts. The State also contended that the United States Supreme Court in the New York Central case previously had determined the validity of the provisions of the New York law.

The attorney general of New York, in commenting upon the stand taken by the United States Supreme Court, said that if the section of the New York law had been declared unconstitutional it would have resulted in disastrous consequences. "In the first place," he said, that "appeals which are now handled expeditiously would be congested, inasmuch as in each case the appellate courts would be required to consider the weight of the evidence," and thereby would throw open the entire record taken before the referee in any compensation hearing. Continuing, he said:

> At the present time the number of such appeals is so vast that were the court to consider the complete record in each case it would result in interminable delay in the calendar. Consequently, awards made to injured persons would be held up with the no inconceivable result that such persons or their dependents in many instances would become public charges. Again, it would be necessary to increase

[1] U. S. Bureau of Labor Statistics Bul. No. 224, pp. 232, and 252.

the number of the judges to handle these appeals, with the result that the cost of administering the workmen's compensation act would be vastly increased, throwing an increased burden on the State.

The decision is of additional interest because the workmen's compensation laws of several other States contain similar provisions.[2]

Constitutionality of Federal Longshoremen's and Harbor Workers' Compensation Act Upheld

THE United States Supreme Court on February 23, 1932, in the case of Crowell *v.* Benson, upheld the validity of the Federal longshoremen's and harbor workers' compensation act, and the right of Congress to enact the legislation. (284 U. S. ——.)

In construing the law to be valid, the Supreme Court ruled that the question as to whether the relation of master and servant existed is one in which a district court of the United States may determine in a suit to set aside an award made by a deputy commissioner. This was also true, the court said, in determining whether the injury occurred on a navigable water of the United States.

The original action in the case was brought in the United States District Court of the Fifth Circuit to enjoin the enforcement of an award made by a deputy commissioner of the United States Employees' Compensation Commission of the seventh compensation district in favor of J. B. Knudsen against his employer, Charles Benson. The award was made under the Federal longshoremen's and harbor workers' compensation act (44 Stat. 1424, ch. 509), March 4, 1927.

The deputy commissioner found that Knudsen was injured while in the employ of Benson, and while performing services upon the navigable waters of the United States. It was the contention of the employer that the award by the deputy commissioner was contrary to law because Knudsen was not, at the time of the injury, one of his employees, and that the claim was not under the jurisdiction of the deputy commissioner. Later it was charged that the compensation act was unconstitutional in that it violated several provisions of the United States Constitution—i. e., those relating to due process, right of trial by jury, unreasonable search and seizure, and a provision (Article III) respecting the judicial power of the United States.

The judge of the district court denied a motion to dismiss the case and granted a new hearing upon the facts and the law, and expressed in the opinion that the act would be invalid if not construed to permit such a hearing. The case was subsequently transferred to the admiralty side of the court. The district court held that Knudsen was not in the employ of Benson and restrained the enforcement of the award. (33 Fed. (2d) 137, and 38 Fed. (2d) 306.) Upon appeal the decree was affirmed (45 Fed. (2d) 66) by the circuit court of appeals for the fifth circuit.

The United States Supreme Court later consented to review the case. In the majority opinion written by Mr. Chief Justice Hughes it was stated that the question of the validity of the law may be considered in relation to its provisions defining substantive rights and procedural requirements. The court stated that the act had two fundamental limitations, first, it deals exclusively with compensation

[2] The United States Daily, Jan. 21, 1932, p. 7.

in respect of disability or death resulting from an injury occurring upon the navigable waters of the United States and secondly, that it applies only when the relation of master and servant exists.

The court recited several provisions of the law—defining the words "injury" and "employer," the exclusiveness of the liability of the employer, and the penalty for failure to provide security in the payment of compensation. As the act relates solely to injuries occurring upon the navigable waters of the United States, the court said, it deals with the maritime law as applicable to matters falling within the admiralty and maritime jurisdiction, and "the general authority of the Congress to alter or revise the maritime law which shall prevail throughout the country is beyond dispute."

In defining substantive rights the court pointed out that the act "provides for recovery in absence of fault, classifies disabilities resulting from injuries, fixes the range of compensation in case of disability or death and designates the classes of beneficiaries." There appears to be no room, the court said, for objections on constitutional grounds to the creation of the right of the Federal power to alter and revise the maritime law, unless it can be found in the "due process clause of the fifth amendment." However, it can not be said that either the classifications of the statute or the extent of compensation provided are unreasonable. "Liability without fault is not unknown to the maritime law," the court continued and "apart from this fact, considerations are applicable to the substantive provisions of this legislation with respect to the relation of master and servant similar to those which this court has found sufficient to sustain workmen's compensation laws of the States against objections under the due process clause of the fourteenth amendment."

The court referred to the objections to the procedural requirements of the act which relate to the extent of the administrative authority conferred, and reviewed the provisions relating to the administration of the act which authorized the establishment of compensation districts, the appointment of deputy commissioners, and the authority to make regulations, etc.

The objection raised by the respondent as to the right of a trial by jury was unavailing, the court said, since the "claims which are subject to the provisions of the act are governed by the maritime law as established by the Congress and are within the admiralty jurisdiction." The court then took up the other objections, namely, the procedure which invokes the due process clause and the provision as to the judicial power of the United States.

As to questions of law, the court said, the rulings of the deputy commissioner are without finality. Under the due process clause of the fifth amendment, the question raised was as "to the determination of questions of fact."

On this point the court said that—

> Apart from cases involving constitutional rights to be appropriately enforced by proceedings in court, there can be no doubt that the act contemplates that as to questions of fact, arising with respect to injuries to employees within the purview of the act, the findings of the deputy commissioner, supported by evidence and within the scope of his authority, shall be final. To hold otherwise would be to defeat the obvious purpose of the legislation to furnish a prompt, continuous, expert, and inexpensive method for dealing with a class of questions of fact which are peculiarly suited to examination and determination by an administrative agency specially assigned to that task. The object is to secure within the prescribed limits of the employer's liability an immediate investigation and a sound

practical judgment, and the efficacy of the plan depends upon the finality of the determinations of fact with respect to the circumstances, nature, extent, and consequences of the employee's injuries and the amount of compensation that should be awarded. And this finality may also be regarded as extending to the determination of the question of fact whether the injury "was occasioned solely by the intoxication of the employee or by the willful intention of the employee to injure or kill himself or another." While the exclusion of compensation in such cases is found in what are called "coverage" provisions of the act (sec. 3), the question of fact still belongs to the contemplated routine of administration, for the case is one of employment within the scope of the act and the cause of the injury sustained by the employee as well as its character and effect must be ascertained in applying the provisions for compensation. The use of the administrative method for these purposes, assuming due notice, proper opportunity to be heard, and that findings are based upon evidence, falls easily within the principle of the decisions sustaining similar procedure against objections under the due process clauses of the fifth and fourteenth amendments.

Mr. Chief Justice Hughes referred to the contention based upon the judicial power of the United States (Article III) and said that it presented "a distinct question." However, the present case, he said, "is one of private right, that is, of the liability of one individual to another under the law as defined." There is no requirement, it was held, that "in order to maintain the essential attributes of the judicial power, all determinations of fact in constitutional courts shall be made by judges."

In deciding whether the Congress, in enacting the statute under review, has exceeded the limits of its authority to prescribe procedure in cases of injury upon navigable waters, regard must be had, as in other cases where constitutional limits are invoked, not to mere matters of form but to the substance of what is required. The statute has a limited application, being confined to the relation of master and servant, and the method of determining the questions of fact, which arise in the routine of making compensation awards to employees under the act, is necessary to its effective enforcement. The act itself, where it applies, establishes the measure of the employer's liability, thus leaving open for determination the questions of fact as to the circumstances, nature, extent, and consequences of the injuries sustained by the employee for which compensation is to be made in accordance with the prescribed standards. Findings of fact by the deputy commissioner upon such questions are closely analogous to the findings of the amount of damages, that are made according to familiar practice by commissioners or assessors, and the reservation of full authority to the court to deal with matters of law provides for the appropriate exercise of the judicial function in this class of cases. For the purposes stated, we are unable to find any constitutional obstacle to the action of the Congress in availing itself of a method shown by experience to be essential in order to apply its standards to the thousands of cases involved, thus relieving the courts of a most serious burden while preserving their complete authority to insure the proper application of the law.

The court pointed out that, so far, only the claims of employees within the meaning of the act had been considered. A different question is presented where the fact determinations are fundamental or jurisdictional, "in the sense that their existence is a condition precedent to the operation of the statutory scheme." The fundamental requirements are "that the injury occurs upon the navigable waters of the United States and that the relation of master and servant exists." These conditions are essential because "Congress has so provided explicitly," and because the power of Congress to enact such legislation "turns upon the existence of these conditions."

Regarding the question of whether Congress may substitute for constitutional courts an administrative agency, Mr. Chief Justice Hughes pointed out that—

The recognition of the utility and convenience of administrative agencies for the investigation and finding of facts within their proper province, and the sup-

port of their authorized action, does not require the conclusion that there is no limitation of their use, and that the Congress could completely oust the courts of all determinations of fact by vesting the authority to make them with finality in its own instrumentalities or in the Executive Department. That would be to sap the judicial power as it exists under the Federal Constitution, and to establish a government of a bureaucratic character alien to our system, wherever fundamental rights depend, as not infrequently they do depend, upon the facts, and finality as to facts becomes in effect finality in law.

Whenever the validity of any act of Congress is questioned and doubt is raised as to its constitutionality, the majority opinion showed that—

It is a cardinal principle that this court will first ascertain whether a construction of the statute is fairly possible by which the question may be avoided. We are of the opinion that such a construction is permissible and should be adopted in the instant case. The Congress has not expressly provided that the determinations by the deputy commissioner of the fundamental or jurisdictional facts as to the locality of the injury and the existence of the relation of master and servant shall be final. The finality of such determinations of the deputy commissioner is predicated primarily upon the provision (sec. 19 (a)) that he "shall have full power and authority to hear and determine all questions in respect of such claim." But "such claim" is the claim for compensation under the act and by its explicit provisions is that of an "employee," as defined in the act, against his "employer." The fact of employment is an essential condition precedent to the right to make the claim.

It was pointed out that the question in the present case was not whether the deputy commissioner acted improperly, "but whether he has acted in a case to which the statute is inapplicable."

By providing for injunction proceedings, the Congress evidently contemplated a suit as in equity, and in such a suit the complainant would have full opportunity to plead and prove either that the injury did not occur upon the navigable waters of the United States or that the relation of master and servant did not exist, and hence that the case lay outside the purview of the statute. As the question is one of the constitutional authority of the deputy commissioner as an administrative agency, the court is under no obligation to give weight to his proceedings pending the determination of that question. If the court finds that the facts existed which gave the deputy commissioner jurisdiction to pass upon the claim for compensation, the injunction will be denied in so far as these fundamental questions are concerned; if, on the contrary the court is satisfied that the deputy commissioner had no jurisdiction of the proceedings before him, that determination will deprive them of their effectiveness for any purpose. We think that the essential independence of the exercise of the judicial power of the United States in the enforcement of constitutional rights requires that the Federal court should determine such an issue upon its own record and the facts elicited before it.

The court concluded the opinion by stating that the district court did not err in permitting a new trial "on the issue of employment."

Upon that issue the witnesses who had testified before the deputy commissioner and other witnesses were heard by the district court. The writ of certiorari was not granted to review the particular facts but to pass upon the question of principle. With respect to the facts, the two courts below are in accord, and we find no reason to disturb their decision.

The decree of the lower court was therefore affirmed.

Mr. Justice Brandeis delivered a dissenting opinion, in which Mr. Justices Stone and Roberts joined, holding that the decree should be reversed because Congress did not authorize a new trial. The initial question is one of construction of the longshoremen's act. The act, the dissenting opinion stated, "does not in terms declare whether there may be a trial de novo either as to the issue whether the relation of employer and employee existed at the time of the injury, or as to any other issue, tried or triable, before the deputy commissioner."

Cases were cited showing that lower Federal courts had uniformly held that "the review afforded must be upon the record made before the deputy commissioner; and that the deputy commissioner's findings of fact must be accepted as conclusive if supported by evidence, unless there was some irregularity in the proceeding before him." The dissenting opinion pointed out that nearly all of the State courts have construed the State workmen's compensation laws as limiting the review by the courts to questions of law only, and even in other Federal laws similar to the question involved in this case, creating administrative agencies, "have likewise been treated as not conferring the right to a judicial trial de novo."

It was the aim of Congress clearly specified by the provisions of the act "to expedite the relief afforded." The dissenting opinion stated other reasons for objecting to the majority opinion and concluded that--

> To permit a contest de novo in the district court of an issue tried, or triable, before the deputy commissioner will, I fear, gravely hamper the effective administration of the act. The prestige of the deputy commissioner will necessarily be lessened by the opportunity of relitigating facts in the courts. The number of controverted cases may be largely increased. Persistence in controversy will be encouraged. And since the advantage of prolonged litigation lies with the party able to bear heavy expenses the purpose of the act will be in part defeated.

Illinois Prevailing-Wage Law Declared Unconstitutional

THE Legislature of Illinois enacted, during the 1931 session, a law regulating the wages and hours of work of mechanics and laborers employed under contracts for public works. This law was approved by the governor of the State on June 20, 1931, and became effective on July 1 of the same year.

On September 2, 1931, one Harry A. Mayhew, filed a bill as a citizen and taxpayer against the governor of the State and several other public officers to enjoin them from entering into a contract for the improvement of a section of a State highway. Approximately two weeks later another citizen and taxpayer by the name of Pigott filed another bill in the same court requesting the director of public works to be enjoined from entering into a contract with a road contractor for the construction of a section of a State highway in Cook County. Injunctions in both cases were asked upon the ground that the law was unconstitutional.

The circuit court of Sangamon County held that the act was unconstitutional and granted the relief that was sought by the taxpayers. The case was immediately appealed to the Supreme Court of Illinois and this court, in an opinion written by Judge De Young, affirmed the decision of the lower court. (Mayhew *v.* Nelson and Pigott *v.* Department of Public Works and Buildings, 178 N. E. 921.) The attorney general, who represented the State officers, contended that the act was a valid exercise of the legislative power, that the law was complete and certain in its provisions and therefore was capable of enforcement. The taxpayers on the other hand contended that the law was vague, uncertain in its terms, incomplete and defective in its provisions, that it was difficult of enforcement, and therefore invalid. They also contended that the act was a violation of the constitution in that it delegated absolute or unlimited and arbitrary

powers to an administrative officer; deprived the taxpayers of the State of property without due process of law; and abridged the right of contractors to enter into contracts.

The supreme court in rendering its opinion declared that it would be necessary only to consider the contention that the act was void because of incompleteness and uncertainty, and that it delegated arbitrary power in violation of the constitution. The court said that when a law left the legislature it "must be complete in all its terms and conditions so that every person may know by reading the law what his rights are and how it will operate when put into execution." The court, quoting from a former Illinois case (People *v.* Rogier, 326 Ill. 310, 157 N. E. 177), declared that a law "which is so vague, indefinite, and uncertain that the courts are unable, by accepted rules of construction, to determine with any reasonable degree of certainty what the legislature intended, or which is so incomplete or conflicting and inconsistent in its provisions that it can not be executed, will be declared to be inoperative and void." After declaring the primary purpose of the act the court declared:

> The act not only prescribes no test or standard by which the prevailing rates of wages in a particular jurisdiction may be ascertained but when an improvement extending from one subdivision of the State or municipality into or through another or dividing them is contemplated, no guide is offered by which the applicable rate or rates of wages may be determined.

The court took up the question of adjustments in cases of disputes arising under the prevailing rates of wages and reviewed the various methods of appeal in such cases. The procedure before the various boards, the court said, was considered wholly conjectural, for the act omits "to provide when and where such boards shall meet, whether they shall conduct hearings at which parties interested in the subject matter may appear, whether the attendance of witnesses may be compelled, and whether a record of the proceedings shall be kept."

The law in addition to the provision relative to the payment of prevailing wage rate also limits the hours of work during any one calendar day to eight hours. Numerous exceptions, as in the case of extraordinary emergency caused by fire, flood, danger to life or property, etc., are set forth in the law. The court said that these exceptions would give rise to differences of opinion whether a contractor may avail himself of one or of many. Without considering other objections to the act, the Supreme Court of Illinois concluded it was sufficiently shown that the act was "not only uncertain and indefinite in its provisions, but that it is also incomplete and delegates legislative powers by allowing administrative officers to supply many of its substantial features. Accepted rules of construction applied to certain sections will not avail to disclose the legislative intent, and courts are powerless to supply the omissions of the act. No person, by reading the act, will know with a reasonable degree of certainty what rights it confers and what duties or obligations it imposes."

The act was therefore declared void.

Member of Religious Order Denied Claim Under Workmen's Compensation Law

THE Supreme Court of the State of Michigan, in a 6-to-2 opinion, declared that one injured while performing duties as a probationer, intending to qualify for admission to membership in a religious order, was not entitled to workmen's compensation. (Blust *v.* Sisters of Mercy et al., 239 N. W. 401.)

It appeared that Loretta Blust was injured while cleaning the drum of a laundry mangle at Mount Mercy Academy in Grand Rapids on November 16, 1929. She presented a claim against the institution and against the Hartford Accident & Indemnity Co. for compensation.

The matter came up for a hearing before a deputy commissioner of the Michigan Department of Labor and Industry, and an award was entered in favor of the petitioner. The insurance company appealed from the award of the deputy commissioner to the department of labor and industry, and upon a final hearing the award of the deputy commissioner was reversed and the claim of compensation was denied.

The case was thereupon appealed to the supreme court of the State. The main question involved was whether the petitioner was an employee within the meaning of the Michigan workmen's compensation law. The contention of the insurance company was that, in order to recover under the compensation law the injury must "arise out of and in the course of an employment"; that the relation of employer and employee and a contract must be involved; and that the only basis of such a contract, either expressed or implied, would be the relation of employer and employee. Mr. Justice Potter, in a written opinion in which Mr. Chief Justice Butzel concurred reversed the award of the department of labor and industry and held that the facts of the case disclosed the relationship of master and servant. In support of this conclusion several cases were reviewed, one in particular in which a question arose whether a student brakeman was a railroad employee. (Atchison, Topeka & Santa Fe Ry. Co. *v.* Fronk, 87 Pac. 698.) Against the opinion of Mr. Justice Potter six other judges of the supreme court took exception and, in an opinion written by Mr. Justice Wiest, affirmed the decision of the department of labor and industry.

Mr. Justice Wiest pointed out that the plaintiff in the case had joined the Sisters of Mercy, an established charitable organization, as a probationer intending to qualify for admission to membership in the order. The various stages of noviceship were recited and it was shown that "her relation as a novitiate was that of free-will devotion of efforts and talents to the religious and charitable purposes of the order." According to the rules of the order she was to receive instruction calculated to qualify her for various services upon reaching full membership and was to be provided suitable care, food, clothing, and shelter, but was to receive no remuneration for such services. Upon receiving injuries which rendered her totally disabled, the order cared for her, met all expenses which according to the rules it was bound to do, and there was no interruption of her relation to the order during the incapacitated period. Mr. Justice Wiest said as follows:

> I find no analogy between instances of work without pay in industrial and professional pursuits, in order to qualify for work with pay, and an instance of

entering a charitable and religious order as a novitiate with intent to qualify for membership and a life devoid of pecuniary purpose. In the one instance there is the relation of master and servant and a semblance of hiring, though without wage, but with commercial earmarks, while in the other there is no relation of master and servant, no hiring, and no commercialism, but a devotion to charitable purpose without hope of pecuniary reward.

Although it was shown and determined that the Sisters of Mercy had employees for hire and had even elected to come under the Michigan workmen's compensation law, members of the order and novitiates were not covered and the insurance company did not indemnify the society for the expense of caring for any injured members or novitiates. The court pointed out that the workmen's compensation law requires the relation of employer and employee under a contract of hire. In this case it was pointed out there was no hiring and "it would be unfortunate to hold that the Sisters of Mercy hire persons to submit to training for membership in the sisterhood. The work of the Sisters of Mercy, in the care of indigent and other sick and infirm persons, and in no manner, directly or indirectly, for private profit, constitutes a public charity. The compensation law allows nothing for pain and suffering."

In the testimony brought out at the trial it was shown that, even though an award were made, such would not come to the injured probationer but would belong to the order by virtue of her relationship to it. Regarding this the court said:

> Neither at common law nor under the compensation act can plaintiff have remedy against the Sisters of Mercy. It would be a strange situation, indeed, to permit the Sisters of Mercy, one defendant herein, to reimburse itself for expenses, incurred in caring for a novitiate, in the manner here attempted. Plaintiff has no interest in any recovery of an award. She recognizes that her interest in an award is only that of the Sisters of Mercy.

In concluding the court inquired, "If a novitiate is held to be an employee and the Sisters of Mercy an employer, then what is the contract of hire?" It can not be stated, the court said, "for there is none."

Law Establishing Wage-Claims Court in Colorado

THE 1931 legislature of the State of Colorado enacted a law establishing a wage-claims court in each county of the State (ch. 170, Laws of 1931). The wage-claims court is administered by the justice of the peace in each county and exercises jurisdiction in all cases of claims of money due for labor performed upon any contract of employment where the amount claimed does not exceed $100.

About 13 States have small-claims courts exercising jurisdiction over the collection of small wage claims. These States are: Arizona, California, Connecticut, Kansas (small debtors' court), Maryland (people's court), Massachusetts, Minnesota (conciliation courts), Nevada, New Jersey, New York (municipal courts and certain other special courts), Oregon, South Dakota, and Washington.[1]

The majority of the States have some form of wage-payment legislation, consisting usually of a requirement that the wages must be paid within a certain number of days, and providing a penalty for failure to comply with the law. The various labor officials in the States have

[1] Report of the standing committee on legal aid work to the American Bar Association, May, 1930. But see also Iowa law (ch. 478, secs. 10820-10824, Code, 1924), Labor Review, November, 1928, pp. 38-40.

used these statutes as a basis for wage adjustment and some of the laws carry a provision conferring upon the State labor department or bureau, as the case may be, the power to secure collection. However, if they fail to adjust the matter with the employer, legal action is necessary for collection and in many instances the department has no authorization to enforce collection by legal action and the employee is usually unable to bear the costs of such procedure.

Several legislative attempts have been made by the States to overcome this difficulty, by incorporating provisions which give the privilege of recovering attorneys' fees in suits for wages without regard to the establishment of claims.[2] Such laws have been condemned by the courts of last resort as being unlawful discrimination in favor of certain suitors who are not distinguishable from other litigants on any proper basis, the law being, therefore, subject to condemnation as special or class legislation. (Gulf, etc., R. Co. *v.* Ellis, 165 U. S. 150; Coal Co. *v.* Rosser, 41 N. E. 263; Chicago, etc., R. Co. *v.* Mashore, 96 Pac. 630.)

The courts are not uniform, however, in their ruling on this question, some courts holding that such fees were taxed not as a penalty but as a fair award of costs. (Title Guarantee & Trust Co. *v.* Wrenn, 56 Pac. 271; Singer Mfg. Co. *v.* Fleming, 58 N. W. 226; Vogel *v.* Pekoc, 42 N. E. 386.) Several of the State legislatures, realizing that the costs and delays of legal procedure are unduly burdensome, have made special provisions to cover the cost. One State [3] has established a trust fund, known as a contingent fund of the labor commissioner, to be used in paying costs in wage-claim proceedings. This fund is replenished by the claimant's placing in the fund a reasonable per cent of the amount recovered. Various methods are used by other States, but in many States much more might be accomplished along this line under improved legislation. The need, as pronounced several years ago by the late Chief Justice William H. Taft, is that "something must be devised by which everyone, however lowly and however poor, however unable by his means to employ a lawyer and to pay court costs, shall be furnished the opportunity to set this fixed machinery of justice going." [4]

The text of the new Colorado wage-claims court act is given below:

ACTS OF 1931

CHAPTER 170.—*Wage-claims court*

SECTION 1. *Wage-claims court established.*—There is hereby created and established in each of the several counties of this State, a court of inferior jurisdiction, to be known as the "Wage-claims court." The justices of the peace in their several counties and precincts shall sit as judges of said courts, and exercise the jurisdiction hereby conferred, in all cases arising under the provisions of this act.

SEC. 2. *Jurisdiction.*—The wage-claims court shall have and exercise jurisdiction in all cases of claims of money due for wages or salary earned, or for work and labor performed, upon any contract of employment, express or implied, where the amount claimed, exclusive of interest and costs, does not exceed the sum of $100. All actions arising under the provisions of this act shall be brought in the county where the defendant resides, or where the work or labor, or some part thereof, was performed: *Provided,* That no action shall be brought in said court by the assignee of any such claim, or upon an assigned claim.

SEC. 3. *Procedure.*—[This section covers the procedure and prescribes the forms to be used in affidavit of claim and order of appearance. A docket fee of $1 is charged, which covers all the costs in the justice of the peace court.]

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[2] Ohio Rev. Stat., sec. 6563a; Oklahoma, Acts of 1895, ch. 51; Texas, act of April 5, 1889.
[3] Nevada, Acts of 1915, ch. 203 (as amended by Acts of 1925, ch. 95).
[4] Bureau of Labor Statistics Bul. No. 398: Growth of legal-aid work in the United States, p. iii.

SEC. 4. *Service.*—A true copy of the affidavit and order mentioned in the preceding section may be served upon the defendant personally by the justice of the peace, by the plaintiff, or by any constable of the county, who shall make an affidavit of such service, stating the time and place thereof.

SEC. 5. *Hearing.*—Upon the day set for the hearing of the said claim, if the defendant fail to appear at the time and place stated in said order, he having been duly served therewith, as provided in the preceding section, the judge shall enter judgment for the amount proven to be due the plaintiff, together with interest at the rate of 8 per cent per annum from the time said claim became due, and for costs. If both parties appear, the judge shall hear their testimony, and such other witnesses as they shall produce, together with such other evidence as may be offered in support of the respective claims of the parties, and shall enter such judgment as the justice of the case shall require: *Provided*, That interest and costs shall be allowed in all cases where the judgment is for the plaintiff. No continuance shall be granted or allowed in such court except for good cause shown. No formal pleading other than the affidavit and order herein provided for shall be necessary, and the hearings in such court shall be informal, with the sole object of dispensing speedy justice between the parties.

SEC. 6. *Appeal.*—If the judgment be against the defendant he shall pay the same forthwith, and in default of such payment, execution may issue as in the justice courts. If either party be dissatisfied, he shall be allowed an appeal to the county court of the proper county: *Provided*, That he shall upon the entry of judgment against him, then and there give notice of appeal to the county court, and pay to the justice of the peace the sum of $1.50 to cover the cost of a transcript of such judgment, and shall within 5 days from the entry of such judgment pay to the clerk of the county court, in cash, an amount sufficient to pay said judgment in full, together with all costs in the county court, and shall within 5 days after docketing said cause in the county court, give notice to the plaintiff that he will within 48 hours from the service of such notice, appear in the county court and ask that the said cause be set for trial.

Upon the payment to the said justice of the peace of the cost of a transcript as aforesaid, the said justice shall forthwith make, certify, and transmit to the county court of the proper county a complete transcript of all the proceedings before him.

SEC. 7. *Appeals disposed of immediately.*—It shall be the duty of the county court to dispose of all such appeals with all convenient speed, and if the defendant shall fail to docket said cause in the county court and to pay in the sums as provided in the preceding section, within the time therein provided, the county court shall dismiss said appeal. If the judgment in the county court shall be for the plaintiff, the court shall order the clerk to pay the amount thereof to the plaintiff. If the judgment of the county court be for the defendant, he shall have judgment for his costs.

SEC. 8. *Fees.*—After judgment the justice of the peace shall issue such process, and shall be entitled to collect such fees and charges as are allowed by law in justice courts for like services, and no others.

SEC. 9. *Supplies.*—The board of county commissioners of each of the several counties in this State shall furnish to the justices of the peace a reasonable supply of blanks and forms, docket book, and other supplies necessary for the use of such justice when sitting as a wage-claims court.

Inquiry into Applicability of Chinese Factory Act

THE practicability of enforcing the Chinese factory law which was passed in 1929 and which was to have become operative from February 1, 1931,[1] is the subject of a study and report made by Ta Chen, of Tsing Hua University, Peiping.[2]

Toward the close of January, 1931, the enforcement date of the act was postponed to August 1, 1931. Among the reasons that necessitated the delay was the fact that the original legislation did not provide for an inspectorate. During February, 1931, however, a

[1] Labor Review, July, 1930, pp. 16–18, and May, 1931, pp. 73–74.

[2] Chen, Ta: Study of the applicability of the factory act of the Chinese Government, a preliminary survey of the Shanghai area. Shanghai, China Institute of Scientific Management, 1931.

measure was enacted providing authority for the creation of such an agency. Another influence in the postponement of the operation of the act was the statement of employers to the Government that the law was very wide in its scope and that it was essential for industry to have time to adapt itself to the requirements. At the conference on the "people's livelihood," held in February, 1931, under the auspices of the National Christian Council, representatives of employers of labor, of educators, social workers, and others discussed the act at considerable length. As an outcome of a resolution adopted at the conference, it was decided that an independent scientific investigation should be made as to the applicability of the law, and Ta Chen was invited to come from Peiping to undertake the study.

The author of the report recognizes that the law is to be applied nationally and that any study of it should be national in scope. However, in the brief period (2½ months) available before the date fixed for the law to go into effect it was not possible to devote close attention to any other locality than the Shanghai district.

The findings of the survey concerning existing industrial practices, some of the principal requirements of the factory act, and the suggestions made by the investigator on the basis of his study are presented in the following table taken from his report:

PRESENT PRACTICE, REQUIREMENTS OF FACTORY ACT, AND SUGGESTIONS OF INVESTIGATOR ON BASIS OF SURVEY

Item	Present practice	What the act requires	Practice recommended on basis of study
Record keeping	In vogue, but upon simple plan.	15 categories; full copies twice yearly.	15 items; annual summary reports.
Hours of work per day	8 to 11.3 hours (average in 6 industries).	8 hours; 10 hours with permit.	10 hours, for women and children only.
Hours of night work for—			
Women	Between 6 p. m. and 6 a. m.	None from 10 p. m. to 6 a. m.	Any 10 hours between 6 p. m. and 6 a. m., for next 3 years.
Children	do	None from 7 p. m. to 6 a. m.	Do.
Overtime	No limit	2 hours per day, up to 36 per month.	As in act.
Rest days	Average of 2.6 per month without pay; often not taken.	4 per month, with pay	2 per month, without pay; required to be taken.
National and festival holidays	Average of 14.4 days per year.	8 national holidays, with pay.	As in act.
Annual leave or vacation	Not regularly given.	7 to 15 days with pay	Suspended indefinitely.
Age of admission of young workers.	9 to 10 years, 14 in some cotton mills.	14 years	12 years, by standard agreed upon.
Hours of work of young workers	Full time worked by adults.	8 hours per day	10 per day or night, for 2 years; then 8 hours' work and 2 hours' education by day, and 10 hours at night until night shift is eliminated.
Workmen's compensation benefits for—			
Temporary disability	Commonly paid, no standard sum.	Two-thirds of wages for 6 months, then half of wages.	As in act.
Permanent disability	do	1 to 3 years' wages	Do.
Death	do	2 years' wage, plus $300 [1]	Do.
Sickness	Sometimes paid	As for injury	Payment for specified occupational diseases only.
Medical expenses	Commonly paid	Required, up to $30 [1]	As in act.
Funeral expenses	do	do	Do.

[1] United States currency.

PRESENT PRACTICE, REQUIREMENTS OF FACTORY ACT, AND SUGGESTION OF INVESTIGATOR ON BASIS OF SURVEY—Continued.

Item	Present practice	What the act requires	Practice recommended on basis of study
Education	55 factories have provision.	10 hours a week up to 16 years of age.	As in act for those 12 to 15 years of age, after 2 years.
Maternity bonus	Averages $16.02 [1] per case.	8 weeks' leave, with pay	4 weeks' leave to those employed 1 year, after 1 year.
Bonus	Common	Bonus or share of profit	Up to 4 per cent of annual wage.
Safety and health provisions	Inadequate in many factories.	Not sufficiently definite	Clear, definite.
Wage payments	1 or 2 a month, fines deducted in advance at times.	2 a month—no deductions in advance.	As in act.
Principles of wage determination.	Supply and demand.	Cost of living in district	Postponed for scientific investigation.
Contracts	Sometimes written.	Double pay in lieu of notice; or pay and a half for notice period; graduated notice; specified reasons for dismissal.	15 days' notice, or single pay in lieu of notice; suspension of other clauses.
Factory councils	Not found	With discussion functions.	For discussion only.
Apprenticeship	Common, conditions bad.	Contracts and fixed terms.	As in act.

[1] United States currency.

German Decree of December 8, 1931, Reducing Prices, Wages, Etc.[1]

THE emergency decree of December 8, 1931, undoubtedly represents the greatest encroachment ever made by the German Government upon the fundamentals of the economic system. The Government justifies its action with the necessity of bringing the process of deflation to a sharp and definite end, in order to reduce production costs and thus enable German industry to compete on the world markets under the extraordinary difficulties placed by the majority of countries in the way of imports. It is intended that the shrinkage in the volume of production and consumption shall be overcome by a coercive reduction of costs in all phases of economic life, including prices, wages and salaries, rents, public-utility charges, and interest rates. On the other hand, it was necessary to open up new sources of income for the Government in the field of taxation in order to assure the balancing of fiscal budgets. Here the increase of the turnover tax from 0.85 to 2 per cent and a new cut in the pay of Government employees and laborers are the most important measures.

A synopsis of the decree follows.

Price Reduction

PRICES fixed by cartels, syndicates, or the wholesale trade, as is the case in the iron-producing industry, the iron and metal consuming industry, the building trades, the chemical, paper, glass, ceramic, textile and fertilizer industries, are, not later than January 1, 1932, to be reduced by at least 10 per cent, compared with the price level existing on June 30, 1931. If the Federal Minister of Economic Affairs considers a further reduction of prices for specific commodities

[1] Report prepared by Wm. E. Beitz, American consul, Berlin.

essential, he is authorized to adopt appropriate measures within the scope which he considers advisable. If a cartel, syndicate, or wholesalers' organization fails to comply with statutory regulations or ministerial instructions, the pertinent provisions of the cartel or syndicate agreement or contracts for deliveries become inoperative from January 1, 1932. Prices of trade-marked commodities must be reduced from the same date and by the same percentage; also prices for potash and nitrogenous products.

The reduction of coal prices is regulated in a special manner, as the domestic coal market is organized by syndicates made compulsory by law. The prices of black coal and lignite are also to be lowered by 10 per cent not later than January 1, 1932. The syndicates and any wholesalers having exclusive sales rights in specific territories are no longer permitted to resort to punitive measures against retailers (such as refusal to sell or measures having similar prohibitive effects), or impose penalties upon retailers for undercutting prices fixed by agreement; neither can they restrict purchases by retailers of domestic coal.

It is estimated that about 25 per cent of Germany's total industrial turnover covers commodities the prices of which are fixed by cartels or syndicates.

The reduction of open-market prices in the retail trade is assigned to a Federal price commissioner under the supervision of the Chancellor of the Reich. His duties consist in investigating and supervising charges for commodities and services considered of vital necessity (including gas, water, electricity, and transportation), margins of profits, and surcharges. The commissioner is vested with almost unlimited powers in reducing prices, if necessary, and for this purpose will be given extensive assistance by the Federal and State Governments.

Reduction of Interest Rates

Long-term loans.—Interest on long-term loans is reduced by about 25 per cent. The reduction applies to all long-term loans bearing nominally more than 6 per cent interest which are either registered in public books of record, or issued in the form of bonds; or any debts which do not mature until the expiration of one year from the date on which the debt was contracted. Rates between 6 and 8 per cent, inclusive, will be lowered to 6 per cent; higher rates up to and including 12 per cent will be reduced in the ratio of 8 to 6. If the rate is over 12 per cent the portion in excess thereof will be reduced in the ratio of 8 to 4. The reduction applies only to interest payable after January 1, 1932. It also affects interest on revaluated mortgages and bonds which was to be increased from 5 to 7½ per cent on January 1, 1932.

In order to prevent the sudden withdrawal of capital from the market, provision is made that creditors may not call loans of the above description before December 31, 1933. If a loan, according to an agreement already concluded, may not be called within a given period, this period is to be prolonged for two years but not beyond December 31, 1935. If the stipulated date of maturity falls after December 31, 1935, it is to remain in effect. Any other reservations made with regard to the calling of loans, however, shall be duly observed. If notice of the calling of a loan had already been served it remains

effective. The debtor's right to give notice of the termination of a loan is not affected, nor are the remaining provisions concerning revaluated mortgages or bonds. The validity of paragraph 247 of the German civil code (suspended for several years) is restored, which provides that in case the interest rate is over 6 per cent, the debtor may after a lapse of 6 months give 6 months' notice of the termination of the debt.

After December 31, 1931, the right to authorize the issuance of domestic mortgage debentures or other nonregistered bonds, which under paragraph 795 of the German civil code is subject to State authorization, will be reserved to the Federal Government which must obtain the consent of the respective State governments. In this manner the Federal Government will be able to control the movement in interest rates for bonds of the above description.

Short-term loans.—The reduction of interest on short-term credits will be controlled by the Federal bank commissioner who is authorized to reduce the rates in agreement with the Reichsbank and the central associations of credit institutions (if by December 31, 1931, the latter associations have not come to an understanding with regard to the reduction of credit and debit interest rates and commissions). Any decisions reached by the associations are subject to the commissioner's approval and apply to all banks whether or not they are members of an association. The reduction of the Reichsbank discount rate from 8 to 7 per cent and of the collateral loan rate from 10 to 8 per cent, an action taken immediately upon the promulgation of the emergency decreee, was an important step forward in this direction. The association of Berlin banks and bankers followed suit by lowering its debit interest rate from 10 to 8 per cent and its credit interest rate for call money from 5 to 4 per cent for accounts not liable to commission and from 6 to 5 per cent for accounts liable to commission, effective December 10, 1931.

Abolition of Surcharges on Arrears in Taxes

EFFECTIVE January 1, 1932, the surcharge (12 per cent per annum) collected on certain arrears in tax payments, which were introduced in July, 1931, will be abolished. From the same date interest charges on arrears in taxes (at present 24 per cent per annum) will be reduced to 12 per cent; interest for legally postponed customs payments, from 10 to 8 per cent; and the maximum charge for legally postponed tax payments, from 12 to 8 per cent.

Housing and Rents

THIS section provides for the gradual abolition of the rental tax, the reduction of rents, and the further relaxation of housing control.

From April 1, 1935, the rental tax will be reduced by 25 per cent of the proceeds for the fiscal year 1932; from April 1, 1937, it will be reduced by a further 25 per cent; and after April 1, 1940, it will no longer be levied. Until March 31, 1934, the tax may be paid by the house owner in a lump sum amounting to 3 or 3½ times the total amount due for the year 1932, depending upon the date on which payment is made.

Rents for dwellings in so-called old buildings, those which were completed prior to July 1, 1918, are from January 1, 1932, to be generally lowered by 10 per cent.

Rents for dwellings in new buildings, or those completed after July 1, 1918, are to be lowered in proportion to the savings involved by the reduction of interest on mortgages or debts resting on the property. It is believed that on this basis the rent will in many cases be reduced by more than 10 per cent.

Forced Sales

THERE are a large number of measures to safeguard real-estate owners against the sale of their property at ruinous prices. The more important features of these measures are as follows:

The offer of the highest bidder at an auction shall normally not be acceptable if it amounts to less than seven-tenths of the value of the property. The debtor who, on account of the economic crisis, is unable to meet his obligations shall have the right to apply for the suspension of a forced sale for a period not exceeding six months and for the institution of receivership; to avoid expensive administrative machinery in this connection the debtor himself may be appointed as receiver under official control.

Similar protection had previously been granted to farmers in eastern States under the eastern farm relief act. It is now extended to cover the whole of Germany and to apply to municipal as well as rural property.

Miscellaneous Economic Measures

TAX reductions, to facilitate the decentralization of large combines which find it more and more difficult to cope with the present economic difficulties, vary according to the nature of the process of decentralization. They are restricted to joint-stock companies because of the severe publicity regulations to which stock companies are subjected under recent legislation. The tax reductions apply to the capital tax, the land-purchase tax, and trade-equipment tax. Communal or State surcharges to any of these taxes are forbidden.

Similar concessions are made with regard to the liquidation of companies, no matter whether they are joint-stock companies, limited-liability companies, or similar enterprises. In that case the company in liquidation shall be exempt entirely from the land-purchase tax, the increment-of-wealth tax, and income tax. The duration of these provisions is limited until December 31, 1934.

Revised appraisement regulations are authorized. In view of the fact that the standard appraisement and assessment of the property tax as of January 1, 1931, under existing regulations, was to form the basis of assessment for various taxes on property for 3 or 6 years, as the case might be, the Government is authorized to revise the pertinent statutory regulations in such a manner as to adapt them to the changes n the value of property having occurred since January 1, 1931.

A subsidy for industrial cooperatives is provided for. The Government is authorized to appropriate up to 20,000,000 marks[2] ($4,760,000) for financing the rationalization of industrial cooperatives.

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[2] Conversions into United States currency on basis of mark=23.8 cents.

Social Insurance and Welfare

THE decree authorizes a large number of economy measures in various branches of social insurance including the restriction of the children's allowance to a given age, the restriction or avoidance of overlapping in annuity payments, etc. The more sweeping measures are: The abolition of voluntary benefits in wage earners' old-age and invalidity insurance, and health insurance; restriction of benefits for survivors; and the discontinuance in workmen's compensation of annuity payments to persons who have lost less than one-fifth of their working capacity. By this latter provision the number of annuities under workmen's compensation will be reduced by about 400,000.

Labor Regulations

WAGES and salaries in private enterprise regulated by standard wage agreements are to be adapted to the wage level of January, 1927 (the date which marked the beginning of the last business rise). The Federal Government believes that at that time a certain equilibrium was established in wages and salaries after the war, inflation and currency crisis, while the standard of living was higher than it is to-day (144.6 as against 131). Because a reduction of wages will in many cases amount to more than 10 per cent, it is provided that 10 per cent shall not be exceeded except in the few cases in which wages have not been reduced since July 1, 1931. In these exceptional cases the reduction shall not go beyond 15 per cent. The wage reductions must be agreed upon by employers and workers not later than December 19, 1931; if an understanding can not be reached, a binding decision shall be made by the arbitrator, with due regard to the special conditions of an individual industry, district, or group of enterprises.

The decree provides further that all standard wage agreements in effect on December 9, 1931, the date on which these provisions went into force, shall expire on April 30, 1932, unless they cover a protracted period or the parties to the agreement make a different arrangement with regard to the duration of the agreement after these provisions have become effective.

It was proposed to make the introduction of a cut in wages dependent upon a prior general reduction in prices, but from the foregoing it appears that prices and wages are to be lowered simultaneously.

Measures to Insure the Balancing of the Budgets

A NEW cut, effective until January 31, 1934, will be made as of January 1, 1932, in the pay of Government officials, salaried employees, and wage earners in Government service, amounting to 9 per cent of the basic pay in regard to officials and 10 per cent of the current standard wage provided by agreements relative to salaried employees and wage earners.

Effective January 1, 1932, the turnover tax will be increased from 0.85 to 2 per cent, except with respect to grain, flour, bran, bread, and other bakers' commodities.

Supplementary to the Government's previous measures against capital "flight" abroad which, it is officially stated, proved satisfactory, a so-called "Federal flight tax" is assessed on German nationals or enterprises which have given up their residence or place

of general abode in Germany since March 31, 1931, or will do so by January 1, 1933. The rate of the tax is 25 per cent of the entire taxable property of the delinquent persons or enterprises. It is payable in the first case one month after the going into effect of the "Federal flight tax" and in the second case simultaneously with the relinquishment of the residence or place of general abode in Germany. If the tax is not paid, a warrant will be issued against the delinquent authorizing his arrest on his return to Germany and a term of imprisonment of not less than 3 months; his property located or invested in Germany will be attached as security; and a fine will be imposed. The tax, however, is to apply only to persons or enterprises with taxable property on January 1, 1928, or January 1, 1931, of more than 200,000 marks ($47,600) and with a taxable income of more than 20,000 marks ($4,760) during the current period of assessment or the two preceding ones. Delinquent persons having already emigrated may, under certain conditions, be exempt from the tax if they resume their abode in Germany.

Legislation Regulating Hours of Work in the Spanish Zone of Morocco [1]

THE legal 8-hour workday has been put into effect in the Spanish Zone of Morocco as a result of a legislative decree dated September 7, 1931.[2]

The legislation in question limits the hours of labor for all except certain specified classes of labor (such as domestic servants, hotel employees, etc.) to 8 per day and 48 per week. Provision is made for extension of working hours in certain emergencies and also under conditions agreed upon by employers and employees and approved by the Government authorities (*Direccion de Intervencion Civil*). The percentages of increase of wages for overtime work are stipulated.

The employment of children of either sex under 12 years of age is prohibited, and on certain specified types of work their employment under the age of 16 is also prohibited. The hours of labor of children between the ages of 12 and 16, with certain exceptions, are limited to 6 hours.

Night work is prohibited for women, and for children under 16. Special provisions of the law apply to expectant and nursing mothers.

Further provisions regulate the hours of midday rest and the sanitary conditions at places of employment. Vaccination certificates are to be required by employers in the case of women and minors.

Workers' wages are required to be paid not less frequently than twice a month, and salaries of office workers once a month, with payment in legal tender, either Spanish or Hassani pesetas.

Copies of the regulations must be posted in all workshops. Violations of the provisions are punishable by fines ranging from 5 to 500 pesetas, or in flagrant cases by the closing of the establishment of the offending employer for a period to be determined by the authorities.

[1] Report from American Consulate General, Tangier, Morocco.
[2] Published in the Boletin Oficial de la Zona de Protectorado de Espana en Marruecos, No. 18, issue of Sept. 25, 1931.

WORKMEN'S COMPENSATION

Recent Compensation Reports

Oregon

THE financial report of the State Industrial Accident Commission of Oregon for the fiscal year ending June 30, 1931, shows an excess of disbursements over receipts for the year of $7,805.27. Receipt of premiums by the State accident fund amounted to $2,395,339.81 from the employers and $299,412.41 from the workers, a total of $2,694,752.22. Interest, penalties, and other receipts increased the amount to $3,048,597.21.

Disbursements, totaling $3,056,402.48, included payments for time loss, $998,996.34; medical aid, $759,051.68; pensions, $726,819.05; burial expense, $13,800; permanent partial disability, less than 24 months, $207,902.98; physiotherapy, rehabilitation, etc., $70,134.48; administrative expense, $279,697.95.

United States and District of Columbia

THE fifteenth annual report of the United States Employees' Compensation Commission, for the fiscal year ending June 30, 1931, covers the operations of the three Federal workmen's compensation acts administered by the commission: United States employees' compensation act, approved September 7, 1916; longshoremen and harbor workers' compensation act, approved March 4, 1927; and District of Columbia workmen's compensation act, approved May 17, 1928.

United States Employees

COMPENSATION and medical care are provided under the United States employees' compensation act for civil employees suffering personal injuries while in the performance of their official duties and for dependents of those who died as a result of such injuries. The term "civil employees" has been defined by the commission to cover all employees of the Federal Government, including direct employees of the United States Shipping Board Merchant Fleet Corporation, the Inland Waterways Corporation, and employees engaged in work under certain cooperative agreements between the Federal Government and the States. It does not include "officers" of the Federal Government, such as United States attorneys, assistant attorneys or marshals, or commissioned medical officers of the Public Health Service, but the original law was later extended to cover officers and enlisted men of the Naval Reserve, and employees of the District of Columbia except members of the fire and police departments.

It is stated that the report of the Civil Service Commission shows a total of 608,915 employees in the executive civil service of the Government on December 31, 1930, but as this does not include all employees covered by the compensation law, the actual coverage is unknown.

Reports were received during 1930 of 26,069 new injuries, an increase of 1.48 per cent over the number reported during 1929 (25,690). The number of claims on account of death or loss of wages was, however, reduced from 9,337 for 1929 to 9,283 for 1930, a decrease of 0.58 per cent.

The number of cases closed during 1930 consisted of 320 fatal cases, 247 of which were approved while 73 were disapproved, and 26,764 disability cases, a total of 27,084 cases. The disability cases consisted of 280 cases involving permanent partial disability, 16,361 cases of temporary total disability causing loss of time, 8,678 cases in which the injury did not cause a loss in working time, and 1,445 cases disapproved by the commission.

Table 1 shows a summary of all nonfatal-injury cases closed, and all fatal cases acted upon by the commission during the calendar year 1930, together with a statement of the cost of medical care during the fiscal year ending June 30, 1930. The tabulation does not include expenditures in permanent disability cases on the rolls of the commission on December 31, 1930, except the cost of medical care included in the $717,945 expended for that purpose during the past fiscal year.

TABLE 1.—AWARDS AND VALUATIONS UNDER FEDERAL EMPLOYEES' COMPENSATION ACT, BY EXTENT OF DISABILITY, 1930

Extent of disability	Number of cases	Duration (days)	Average duration (days)	Amount of award	Average award
Temporary total disability:					
Compensated	7,456	304,681	40.8	$741,927	$99.51
Noncompensated	8,905	80,454	9.0		
Total	16,361	385,135	23.5	741,927	45.35
Permanent partial disabilities:					
Dismemberments	[1] 149	21,029	141.1	53,952	362.09
Loss of function	[2] 131	86,502	660.3	230,663	1,760.79
Total	280	107,531	384.0	284,615	1,016.48
Deaths	247			[3] 2,869,143	11,615.96
Burials	217			41,851	192.86
Award before death	41			28,131	686.12
Medical cost (fiscal year 1930)				717,945	
Grand total	16,888	492,666	[4] 29.6	4,683,612	277.33

[1] Includes 28 noncompensated cases with a duration of 917 days.
[2] Includes 8 noncompensated cases with a duration of 214 days.
[3] Estimated total cost.
[4] For 16,641 nonfatal cases.

On December 31, 1930, there were 731 cases on the docket in which compensation was being paid for permanent total disability, and 1,134 cases of permanent partial disability in which compensation was being paid for reduction in earning capacity. Approximately 30 per cent of the total disability cases and more than 25 per cent of the partial disability cases are being compensated for injuries of more than 10 years' duration. Total payments made up to December 31, 1930, in these cases amounted to $3,543,880 for compensation and $624,303 for medical cost in the total cases, and $2,788,050 for compensation and $444,175 in the partial cases. The ultimate total cost is estimated to be approximately $20,000,000 for the total cases and more than $9,000,000, exclusive of future medical expense, for the partial cases.

Falls of persons outnumbered all other causes of injury and were responsible for 36 of the deaths and 4,060 of the nonfatal cases closed during 1930, nearly one-fourth of the total number. Handling of heavy objects caused 5 of the deaths and 1,774 of the nonfatal cases, while automobiles caused 21 of the deaths and 918 of the nonfatal cases. Hand tools glancing and slipping caused 2 of the deaths and 892 of the nonfatal cases, while mechanical causes accounted for 11 of the deaths and 748 of the nonfatal cases. These five causes consequently were responsible for slightly more than one-half of the injuries in cases closed during 1930.

Longshoremen and Harbor Workers

UNDER the longshoremen's and harbor workers' compensation act compensation and medical care for injuries is provided for employees of private employers while engaged upon work which is in whole or in part in maritime jurisdiction on the navigable waters of the United States, including dry docks. Aside from the longshoremen, who constitute the largest group of workers coming under the act, it also covers mechanics and ship repairmen, delivery men, solicitors, and inspectors, not employed by the Federal or State Government. Masters and crews of vessels are excluded, as are employees hired by masters of vessels under 18 tons net. Accurate information on the total number is not available, but a conservative estimate by the commission places the number of workers subject to the benefits of the law in excess of 300,000.

Reports were received during the fiscal year ending June 30, 1931, of 156 fatal and 28,705 nonfatal injuries, a total of 28,861 cases, or 27.6 per cent less than the number reported for the previous fiscal year (39,850). Besides the new cases, a total of 1,241 former cases were reopened for consideration during the year.

The number of cases closed during the year consisted of 106 fatal and 30,383 nonfatal injuries. In 25 of the fatal cases there were no dependents, and 67 other cases did not come within the scope of the law. The nonfatal cases consisted of 11,776 cases in which compensation payments were completed, 13,261 cases involving no loss of time, 4,067 cases in which the duration of disability did not exceed 7 days, and 1,279 cases disapproved by the commission.

Table 2 shows the nonfatal cases involving loss of time in which final payments had been made, with amount of compensation, and the fatal cases awarded compensation during the year, with the estimated total cost, by extent of disability and by occupation. The total nonfatal cases include 3,777 cases in which the duration of disability was seven days or less, and consequently not compensable.

At the close of the fiscal year there were 291 fatal cases on the docket, in which $508,863 had been paid as compensation and the estimated future cost was $1,590,813; and 2,104 nonfatal cases, in which payments of $1,438,999 had been made as compensation and the estimated future cost was $1,718,421. Payments for medical care and treatments are not included.

There was a general increase in the average severity of the injuries, and consequently also in the cost, for both longshoremen and repairmen, the two principal groups, as compared with the previous year. While the number of nonfatal, lost-time injuries for longshoremen decreased 20.8 per cent, the total days lost rose 4.3 per cent, raising

the average disability period from 48.5 days to 63.9 days per injury. For repairmen the number of lost-time injuries decreased 28.8 per cent, while the total days lost increased 1.5 per cent, raising the average disability to 57.5 days per injury, or 17. 2 days more than in the previous year.

TABLE 2.—LOST-TIME INJURIES AND COMPENSATION AWARDS UNDER LONGSHOREMEN'S AND HARBOR WORKERS' ACT, BY EXTENT OF DISABILITY AND BY OCCUPATION, 1930-31

Occupation	Total injuries with loss of time	Fatal cases		Nonfatal cases, closed					
				Permanent partial disabilities		Temporary total disabilities		Total	
		Number	Estimated total cost	Number	Amount of compensation	Number	Amount of compensation	Number	Amount of compensation
Longshoremen	11,509	55	$309,764	810	$791,650	8,164	$1,016,307	11,454	$1,807,957
Repairmen	3,315	13	95,696	257	275,483	1,830	244,659	3,302	520,142
Supply men	21	0		1	415	11	522	21	937
Inspectors	49	0		1	375	33	3,408	49	3,783
Miscellaneous	211	11	74,301	14	7,650	128	24,964	200	32,614
Total	[1]15,105	79	479,761	1,083	1,075,573	10,166	1,289,860	[1]15,026	2,365,433

[1] Includes 3,777 cases in which the duration of disability was 7 days or less.

The principal cause of injuries to longshoremen was handling of material, which accounted for 28.3 per cent of all lost-time injuries. Falling objects came next, with 24.1 per cent, followed by moving objects, with 20 per cent, and falls of persons, with 13.8 per cent. For repairmen the most frequent and serious cause was falls of persons, which accounted for 21.6 per cent of the nonfatal injuries. Handling material caused 18.1 per cent, flying objects 17 per cent, and falling objects 9.1 per cent.

District of Columbia Private Employees

UNDER the District of Columbia workmen's compensation act compensation and medical care for injuries is provided for workers in practically all private employment in the District of Columbia. The only employees excluded are masters or crews of vessels, employees of a common carrier by railroad when engaged in interstate or foreign commerce, and employees engaged in agriculture, domestic service, or casual employment not in the usual course of the trade, business, occupation, or profession of the employer. Approximately 14,000 employers are affected by the law, and it is estimated that it covers from 75,000 to 100,000 workers.

Reports were received during the fiscal year ending June 30, 1931, of 71 fatal and 19,576 nonfatal injuries, a total of 19,647, or 6.2 per cent more than for the previous year (18,499). Besides the new cases reported, a total of 703 previously closed cases were reopened for consideration during the year.

The number of cases closed during the year consisted of 47 fatal and 19,986 nonfatal injuries. In 10 of the fatal cases there were no dependents, in 18 others it was held that the injury did not come within the law, and in 15 others that the death was not due to the injury. The nonfatal cases included 3,507 cases in which compensation was

paid without an award, 11,431 cases involving no loss of time, and 3,982 cases in which the duration of disability did not exceed 7 days.

Table 3 shows the nonfatal cases involving loss of time in which final payments had been made, with amount of compensation, and the fatal cases awarded compensation during the year, with the estimated total cost, by extent of disability and by industry. The total nonfatal cases include 3,913 cases in which the disability did not exceed seven days and for which no compensation was paid.

TABLE 3.—LOST-TIME INJURIES AND COMPENSATION AWARDS UNDER THE DISTRICT OF COLUMBIA COMPENSATION ACT, BY EXTENT OF DISABILITY AND BY INDUSTRY, 1930-31

Industry	Total injuries with loss of time	Fatal cases		Nonfatal cases closed					
				Permanent partial disabilities		Temporary total disabilities		Total	
		Number	Estimated total cost	Number	Amount of compensation	Number	Amount of compensation	Number	Amount of compensation
Clerical and personal service	1,245	7	$42,684	19	$17,861	611	$31,896	1,238	$49,757
Construction	2,096	15	79,642	36	45,954	918	77,184	2,081	123,138
Manufacturing	885	8	41,035	33	25,375	416	23,768	877	49,143
Trade	2,306	7	24,720	31	29,102	1,022	57,128	2,299	86,230
Transportation and public utilities	945	8	39,552	10	11,259	423	20,344	937	31,603
Total	[1] 7,477	45	227,633	129	129,551	3,390	210,320	[1] 7,432	339,871

[1] Includes 3,913 cases in which the duration of disability was 7 days or less.

Handling objects was the principal cause of injuries, and accounted for 24.7 per cent of the total. Falls of persons was next in numerical importance, with 19.2 per cent. Falling objects and striking against objects were each responsible for 7.3 per cent. Of the 45 fatal injuries, 40 per cent were caused by falls of persons and 22.2 per cent by automobiles.

WORKERS' EDUCATION AND TRAINING

Fitting Jobs to Mental Capacity

THE university of the State of New York has recently issued a study made by the vocational adjustment bureau of New York City, dealing with the kind of jobs within the capacity of women and girls of low intellectual levels, and including an analysis of the requisites for filling these jobs satisfactorily.[1] The vocational adjustment bureau began its work in 1919, devoting itself to the study and placement of maladjusted girls. Early in its work it was impressed by the industrial loss due to the idleness of large numbers of young women who were unemployed because no tasks simple enough for them to perform had been found, and by the effect of this enforced idleness upon the girls themselves. At the same time, the bureau discovered, many simple operations in workshops and factories calling for little mental effort were being performed by girls mentally equipped to carry on more complicated tasks. If these girls could be released for higher-grade and better-paid work, room could be found for the subnormal girls who up to that time had been considered a complete loss to society. For years past the bureau has, through psychological tests and analysis of the requirements of a variety of occupations, gathered information as to the mental capacity required for various types of jobs, and the present study is based largely upon data thus collected.

The report is based upon the results of a classification of 2,465 jobs, distributed among six large divisions of industry, as follows:

	Number of cases
Light factory work	1,407
Hand sewing	291
Garment-machine operating	226
Press operating	70
Office, clerical	284
Office, stock girl	94
Selling	93
Total	2,465

The number of cases shown above represents jobs and not individuals. That is, if a girl has held four jobs, they are considered as four separate cases. The worker's mental age, chronological age, and length of time on the job were collected for each case studied, and the type of job was noted. When possible the mental age was determined by the Binet-Simon test for general intelligence, and when some other test had to be used the findings were later transmuted into the Binet equivalent.

The time on the job has been used as the primary criterion of success on the job. The period of time chosen as a measure of success varies for different types of work. Many of the tasks are simple forms of labor, yet girls of low-grade intelligence may be incapable of acquiring sufficient dexterity to learn the process in the time set by the foreman. If a girl can not learn she will be discharged.

[1] Unger, Edna W., and Burr, Emily T. Minimum mental age levels of accomplishment: A study of employed girls of low-grade intelligence. New York, 1931.

It frequently happens that half a day is long enough for a trial at a particular process. In every case the period of time used as a measure of success represents a reasonable margin beyond the time allowed by the average foreman or employment manager before discharging the girl as incapable.

The period of time a girl must hold a job in order to be considered capable of performing it successfully was fixed as follows: All light factory jobs, 3 days; hand sewing, garment machine operating, press operating, and office clerical work, 2 weeks; stock girl in office, 1 week; selling, 1 month. A consistent attempt was made to discover for each occupation the lowest mental age at which the task can be performed sufficiently well for the worker to be retained. This does not mean that a girl of higher mental age may not perform the work better; it simply indicates that since persons of the mental age stated have been found working satisfactorily at a given job, that work may be regarded as within the capacity of persons of the specified degree of subnormality. Stress is laid on the importance of directing girls who are shown by the standardized tests to be of subnormal intelligence into work which does not demand more mentality than they possess.

Full details are given as to each type of work studied, but the main results of the study are thus presented:

> In summing up the findings of this survey it will be observed that work can be found for girls measuring as low mentally as five years. This was found to be the case in the occupation of packing. To generalize that any and all applicants of a retarded mental development of five years can be sent to a packing job is to invite disaster. It does furnish an indication, however, that this occupation, of all those investigated, is the one that makes less call on the intellect of the worker.
>
> Various types of light factory work are found possible for a girl of approximately six years' mentality.
>
> At the 7-year mental level, the range of occupation widens. Assembling, errand-girl jobs, examining and pasting jobs offer many desirable opportunities to girls of this grade.
>
> At least four occupations were found to be open to workers with the mental age of eight years.
>
> When we reach the 9-year level we find four more occupations available.
>
> At the 10-year mental level clerical work is possible and at the 11-year level selling is sometimes a successful type of work.
>
> These conclusions are not carried further since in this survey we are interested only in a study and analysis of occupations suited to those girls whose mental equipment is below the 12-year level.
>
> The realization that persons of low-grade intelligence are capable of performing much of the industrial work of the world is not a new idea. It has long been recognized, and individual cases have been used as illustrations of this fact. As large a survey as this of the industrial situation from the point of view of mental measurements has, however, so far as can be ascertained, not been made before.

Emergency Unit Training Courses in New York City

IN January, 1931, at the East Side Continuation School, New York City, an emergency unit training course was inaugurated by the Emanuel Federated Employment Service cooperating with the welfare council coordinating committee on employment and the city's board of education. This course gives jobless men and women an opportunity to make effective use of some of their leisure by getting additional vocational training either in their own field or in other lines of work. A second and equally important purpose of the course is to maintain the morale and mental equilibrium of those who are in

serious danger of mental collapse because of protracted unemployment. An account of this experiment in adult education by the secretary of the Emanuel Federated Employment Service, who is in charge of the adult unit training course, is published in the January, 1932, issue of the Journal of the American Association of University Women, from which the data here presented are taken.

The school in which this emergency course was established ranks highest in equipment among the general continuation schools of the city. All those who came to the course during the first three or four months of its organization were directed there by the numerous agencies cooperating with the welfare council. After registration applicants were referred to the vocational counselor for consultation, were physically examined by a physician, and had a conference with the class teacher. The adults were placed in the regular continuation-school classes but attended 5 days a week for 4 hours per day instead of attending only 1 day per week. The courses open to men included printing, electrical wiring, plumbing, auto mechanics, woodworking, machine shop, trade drawing, garment designing and tailoring; those open to women, power-machine operating, dressmaking, millinery, and cafeteria work; and those open to both men and women, bookkeeping, stenography, typewriting, civil service, and commercial art.

In order that some might take advantage of the courses who would otherwise not have been in a financial position to do so, a number of organizations have given financial assistance to the persons whom they sent to this school. Some received a tide-over wage of $6 per week; some were given $1.50 per week for car fare and lunches. Various organizations accorded scholarships to students.

At the close of the first month more than 350 persons were enrolled for courses, and at the close of June, the end of the regular school term, the registrations had reached 1,000. The average daily attendance for the 5½ months was 250. The students were constantly coming and going. Some finished a course in a few weeks. Approximately 250 were placed. Numbers left without announcing whether or not they had secured jobs. According to the author, the unfortunate dearth of information concerning the vocational requirements of New York City makes it exceedingly difficult to advise men who come to the school to go into any special trade with the assurance of a future job in that field. Without such assurance it is not easy to hold a man to a unit course when he thinks he might have an equally good chance to get a job by going out every day in search of one.

At first, applicants for courses were directed into existing classes, and this to a large extent is still the procedure. By degrees a large enough group was enrolled to form four separate units of trainees only. The numerous young women who already have had some commercial training and desire to continue such training have been the cause of considerable anxiety to those engineering the short-unit courses. It has been realized that the situation called for very definite guidance, as the commercial field for women is probably one of the most congested and one in which age, personality, and education are highly important factors. The girl, however, whose parents have made great sacrifices to enable her to get a high-school education is not easily induced to become a factory worker. The continuation school has developed the cafeteria course into a tea-room course which

includes waitress and hostess training and management training for those who have the capacity to do such work. A course in beauty culture has also been instituted. It has been found that these courses appeal to many girls and women who would otherwise wish to go into commercial lines.

For the young women who have already had both training and experience in one kind of commercial work and whose education and personality fit them for such work, the school endeavors to supply other opportunities along similar lines.

Some of the men with training and experience in one of the trades have found the trade drawing class of very great assistance. While these men were good workmen, they had previously not been able to read blue prints, which is one of the requirements of modern industry.

As the result of a brief inquiry and several conferences with the director of the Federal Board for Vocational Education and representatives of some of the largest real estate firms in the city, a new course has been inaugurated to train men as handy men and porters. The men taking this course, because of previous training and experience—they are mostly European-trained engineers—will probably rise quickly to the post of assistant superintendent or superintendent in smaller houses, and, we hope, ultimately to superintendent of a large apartment house.

The principal of the school gives the teachers great liberty. The students acquire the fundamentals and as much more as they wish to learn of the particular things in which they are interested. As a consequence, a man who goes into the woodworking class does not have to be taught how to make a mortise or a tenon joint because, according to the curriculum, he should receive such instructions in the second week of the course. The student may already be skillful in such work.

Great credit is given in the article to the acting principal of the school. It is also stated that the teachers have worked hard, at top speed, with large numbers of students eager to make progress. The splendid spirit of the teaching staff the author attributes in large part to the leadership of the acting principal, who visualized the potentialities of the experiment and had the ability to surmount the numerous obstacles resulting from dearth of funds and the rules and regulations of an important civic organization.

Last June the board of education decided to keep on with the instruction of unemployed adults in July and August in the East Side Continuation School and the Harlem Continuation School. Before these schools were opened on July 6 all the important New York City newspapers were requested to carry a news story on the subject. This publicity swamped the East Side school with applicants. By the second day nearly 600 were enrolled. At the close of the first week there were more than 300 on the waiting lists. The registrations for July and August totaled 1,100, while the average daily attendance was 550.

Only applicants over 17 years of age were admitted to the summer school, so that these adult students came in contact only with persons of their own age who had the same earnest purpose and ambition. Classes were conducted in the afternoon only, in order that the students might look for jobs in the forenoon.

Over 2,000 unemployed men and women have registered at the East Side Continuation School during the past eight months. They are largely American born, from all social groups, of all races—white, back, and yellow. Of over 2,000 students, more than half were born in New York State, and the greater

number of these in New York City. Less than one-third are foreign born, and few of these have been in the country so short a time that they can not speak English. There are college and university graduates as well as those who have only graduated from elementary school and high school. There is also a group of older people who left elementary school before graduation at a time when the compulsory school age was much lower than it is to-day.

The greater number of the students tell the school authorities that they are getting something from their courses which they never had before, and that "they feel a reality about the work which they are doing and there is a definite goal toward which they are heading." Many of these people have never had any vocational training; they left high school before they graduated and took the first job offered—one that called for no previous training and in a field where there was a large labor surplus.

Basing her statement on eight months' experimenting, the author says:

> We are firmly convinced that there is a need in our educational system for a school for adults, such as this one. We feel, however, that it should be separate and distinct from a compulsory school or one for young, immature people. There should be great flexibility to accommodate the time that each individual has available. The content of the courses should be adapted to the mature, serious adult. We need more vocational guiding and testing, particularly for the older adult. Sometimes what is needed is not training but advice based upon scientific knowledge. We need more information as to industrial requirements. We must keep in constant touch with all the industrial fields and follow their trends in order that we may know where people in the various age groups with different aptitudes and different experience can be placed.

The writer also points out that although the present situation is not normal because of economic conditions, such conditions have possibly aggravated something that has been in existence for a considerable time. She declares that the educational system in the United States educates boys and girls in accordance with the country's democratic traditions as long as their parents are able to send them to school, or as long as the law makes such attendance compulsory. She contends, however, that most of these young people are given the same education without regard to their aptitudes and without much effort to fit them for industrial life. "The one place where they receive excellent training," she holds, "is the business course in the high schools; but just as we have produced too many automobiles or radios in our factories, so have we produced too many boys and girls for white-collar jobs." According to the article, closer cooperation between industry and the schools, more practical training in various fields, and more real guidance are required lower down in the educational system.

Wisconsin's Itinerant Vocational-Instructor System

WITH the purpose of providing its smaller cities with a variety of occupational instruction at a reasonable cost, Wisconsin is operating an itinerant instructor system. Circuits are formed and a teacher is employed jointly by the local vocational boards of four or five neighboring vocational school cities. Apprentices and journeymen in barbering, plumbing, painting, electrical, and other trades are being taught in this way, according to an article in the annual publication of the State federation of labor.[1]

[1] Wisconsin Federation of Labor, Wisconsin Labor, 1931, pp. 9-19: Park Bench or School Bench, by Jennie McMullin Turner, assistant in teacher training, Wisconsin State Board of Vocational Education.

The State board of vocational education aids in organizing these circuits and the advisory committees representing the masters and journeymen of these respective cities and assists in finding teachers acceptable to all the interested parties. Moreover, the board provides continuing teacher training and help to these itinerant instructors after they are placed on their jobs. The itinerant teacher remains one day a week in each city included in his circuit. In the daytime he visits the local industry, meets with his advisory committee, instructs apprentices, and gives vocational counsel to other part-time school pupils. In the evening he instructs journeymen. This whole scheme of education is complicated and calls for "constant care and thought, but it is justified by the results."

The writer of the article claims that the expansion of this system will insure variety in the vocational program as against a scheme of massing the young people into the few trades a school is able to teach. The itinerant-teacher plan averts overcrowding in these few trades and therefore prevents unemployment. Furthermore, the scheme enables a person already employed in a trade to improve himself and retain his job and thus reduces labor turnover. The progress of the system is dependent in large degree, however, upon the maintenance of the present representative separate board system.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in January, 1932

DATA regarding industrial disputes in the United States for January, 1932, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in 1927, 1928, 1929, and 1930, the number of workers involved and man-days lost for these years and for each of the months, January, 1930, to January, 1932, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The number of man-days lost, as given in the last column of the table, refers to the estimated number of working days lost by workers involved in disputes which were in progress during the month or year specified.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1930, TO JANUARY, 1932, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1930

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost in disputes existing in month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927: Total	734	----------	349,434	----------	37,799,394
1928: Total	629	----------	357,145	----------	31,556,947
1929: Total	903	----------	230,463	----------	9,975,213
1930: Total	653	----------	158,114	----------	2,730,368
1930					
January	45	21	9,240	5,316	184,730
February	52	40	37,480	6,683	438,570
March	49	38	15,017	5,957	291,127
April	64	41	6,379	5,840	189,828
May	66	29	9,329	4,386	185,448
June	59	34	14,011	8,311	144,117
July	78	30	14,308	4,815	141,647
August	51	33	15,902	7,131	142,738
September	72	44	16,337	13,778	208,184
October	47	36	10,858	16,007	335,916
November	44	29	4,390	7,759	273,608
December	26	7	4,863	5,144	194,455
1931					
January	56	20	10,147	2,927	181,031
February	52	34	19,984	12,512	228,329
March	45	27	26,121	28,139	422,545
April	60	39	26,442	22,604	769,720
May	106	49	27,588	15,735	402,437
June	81	51	18,437	17,071	506,097
July	67	54	49,574	58,995	666,309
August	76	43	10,977	17,003	1,213,120
September	110	59	35,859	37,164	491,024
October	70	41	33,548	28,696	1,038,063
November	56	31	12,611	12,910	339,730
December [1]	51	39	5,118	2,509	147,426
1932					
January [1]	63	61	10,146	6,649	133,944

[1] Preliminary figures subject to change.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives by industry, the number of strikes beginning in November and December, 1931, and January, 1932, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER AND DECEMBER, 1931, AND JANUARY, 1932

Industrial group	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	November	December	January	November	December	January
Bakers	2	2		18	29	
Barbers	2	3	1	38	626	700
Brewery and soft-drink workers	1			6		
Building trades	14	14	13	1,567	475	761
Chauffeurs and teamsters	1	5	5	7	313	3,900
Clothing	13	15	19	692	1,417	1,195
Food workers		2			910	
Furniture			1			25
Hotel and restaurant	2			59		
Jewelry workers			1			20
Leather		1	1		48	50
Longshoremen			1			200
Lumber, timber, and mill work	5	1		414	500	
Metal trades	3	1	1	67	70	80
Miners	5	3	6	1,694	638	1,519
Motion-picture operators, actors, and theatrical workers	1			6		
Printing and publishing		1	1		15	45
Stone		1			40	
Municipal workers		1	1		7	20
Telegraph and telephone workers	1	1		40	30	
Textiles	4		9	341		1,287
Tobacco	2			7,662		
Other occupations			3			104
Total	56	51	63	12,611	5,118	10,146

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in January, 1932, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN JANUARY, 1932, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIAL GROUPS

Industrial group	Number of disputes beginning in January, 1932, involving—				
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers
Barbers				1	
Building trades	3	7	3		
Chauffeurs and teamsters			1	3	1
Clothing	6	7	6		
Furniture		1			
Jewelry workers		1			
Leather		1			
Longshoremen			1		
Metal trades		1			
Miners		3	2	1	
Printing and publishing		1			
Municipal workers			1		
Textiles	2	4	2	1	
Other occupations		3			
Total	11	29	16	6	1

In Table 4 are shown the number of industrial disputes ending in January, 1932, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN JANUARY, 1932, BY INDUSTRIAL GROUPS AND CLASSIFIED DURATION

Industrial group	Classified duration of strikes ending in January, 1932			
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	2 months and less than 3 months
Bakers		1		
Building trades	9	1	2	
Chauffeurs and teamsters	4		1	
Clothing	7		1	1
Leather	1			
Miners	3			
Textiles	7	1		1
Other occupations		1		
Total	31	4	4	2

Conciliation Work of the Department of Labor in January, 1932

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 62 labor disputes during January, 1932. These disputes affected a known total of 50,846 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

On February 1, 1932, there were 38 strikes before the department for settlement and in addition 37 controversies which had not reached the strike stage. The total number of cases pending was 75.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF JANUARY, 1932

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Radio musicians, Chicago, Ill.	Threatened strike.	Radio musicians	Asked increase from 10 to 15 members, 6-day week, 30 hours, without pay cut.	Adjusted. Allowed 15 musicians (Class A orchestras), 6-day week of 35 hours, minimum scale of $90 per week.	1931 Dec. 28	1931 Dec. 31	200	500
Annex to post-office building, Elkins, W. Va.	Controversy	Building	Demand for payment of prevailing wage.	Adjusted. Rates fixed and now being paid.	Dec. 17	1932 Jan. 26	25	------
Simon Ackerman (Inc.), New York City.	Strike	Clothing workers	Reduction of force	Adjusted. Accepted wage cut and reduction of force.	Dec. 21	Jan. 20	650	------
Union Coal Co., Airline Coal Co., Big Four Co., Ottumwa, Iowa.	Lockout	Coal miners	Wages cut from $1.04 to 80 cents per ton for machine operators; for others, from 82 to 60 cents.	Unable to adjust. Conference refused by companies.	Dec. 15	Jan. 23	100	------
Post office, Atlanta, Ga.	Controversy	Engineers	Rates for Saturday afternoon and Sunday.	Adjusted. Allowed $62 per week of 56 hours.	Dec. 20	...do	3	260
Post-office building, South Bend, Ind.	...do	Laborers	Hiring laborers as helpers at 40 cents per hour.	Adjusted. Allowed 50 cents per hour.	Dec. 28	Jan. 7	4	------
Post-office building, Greensboro, N. C.	...do	Carpenters	Refusal to pay prevailing wage.	Adjusted. Will receive prevailing scale of 75 cents per hour.	Dec. 30	Jan. 6	------	------
Courthouse and Hall of Records, Elizabeth, N. J.	Strike	Carpenters and structural-iron workers.	Jurisdiction of setting steel frames.	Adjusted. Work awarded to carpenters.	Dec. 22	Jan. 29	31	59
Post-office building, New Britain, Conn.	Controversy	Mason tenders	Contractor refused to pay prevailing wage.	Adjusted. Agreed to pay prevailing rate, 96 cents per hour instead of 40 cents.	...do	Jan. 5	(1)	------
Coal merchants, New York City and Newark, N. J.	Threatened strike.	Coal trucking	Proposed 10 per cent cut and change in working conditions.	Adjusted. Agreed to arbitrate	Dec. 4	Jan. 9	1,000	1,000
Standard Sanitary Mfg. Co., Louisville, Ky.	Controversy	Metal polishers	Wages cut 20 per cent	Adjusted. Accepted 20 per cent cut	1932 Jan. 1	Jan. 12	200	1,800
Building, Wilkes-Barre, Pa.	Strike	Steam fitters and plumbers.	Wages cut	Adjusted. Accepted $1 per day cut; grievance committee appointed.	...do	Jan. 19	80	------
Building, Boston, Mass.	Threatened strike.	Building	Proposed wage cut of 20 cents per hour.	Pending	...do	----------	(1)	------
Burns Bros. and Stephen Fuel Co., New York City.	Strike	Coal drivers	Proposed 10 per cent cut	Adjusted. Agreed on arbitration and returned to work.	Jan. 6	Jan. 8	125	------

Uxbridge Worsted Co., Uxbridge, Mass.	---do---	Worsted weavers	Wages cut 10 per cent; conditions.	Adjusted. Accepted 10 per cent cut and returned; company granted some concessions.	Jan. 4	Jan. 9	750	1,550
Naval Air Base, Sunnyvale, Calif.	Controversy	Tractor operators	Demand for payment of prevailing wage.	Adjusted. Increased from $7 to $9 per day.	Jan. 1	Jan. 6	12	------
Post-office building, South Bend, Ind.	---do---	Electricians	---do---	Adjusted. Allowed prevailing wage—$1 per hour.	---do---	Jan. 7	12	60
Andrew Geller Shoe Co., Brooklyn, N. Y.	Strike	Shoe workers	Asked increase; protest two discharges.	Adjusted. Discharged workers reinstated; some changes in conditions.	Jan. 9	Jan. 11	120	180
Perfect Sportwear Co., New York City.	---do---	Leather workers	Piece rates cut	Pending	Jan. 5	----------	12	------
Post-office building, Evansville, Ind.	Controversy	Building	Prevailing rates not being paid.	Unclassified. Workers were found to have no jurisdiction of the work in progress.	Jan. 1	Jan. 14	15	------
Veterans' Hospital, Albuquerque, N. Mex.	Strike	Electricians	Alleged discrimination against local men.	Adjusted. Satisfactory settlement	---do---	Jan. 12	10	250
County Welfare House, Preakness, N. J.	---do---	Bricklayers, masons, carpenters, and teamsters.	Nonunion drivers employed	Adjusted. Union drivers employed	---do---	Jan. 14	100	------
Nicollet Hotel, Minneapolis, Minn.	Controversy	Employees	Wage cut	Pending	Jan. 5	----------	(1)	------
Parcel Post Building, Jacksonville, Fla.	---do---	Carpenters	Demand for payment of prevailing wage.	Adjusted. Satisfactorily settled	Jan. 1	Jan. 13	10	------
Kay Manufacturing Co., Brooklyn, N. Y.	Strike	Mattress makers	Change in piecework	Adjusted. Returned without change; 10 workers not reemployed.	Jan. 11	Feb. 4	25	275
Penn Mutual Building, Philadelphia, Pa.	---do---	Lathers and sheet-metal workers.	Carpenters doing work claimed by lathers and sheet-metal workers.	Pending	Jan. 1	----------	25	425
Tavel-Constantine (Inc.), Boston, Mass.	---do---	Garment workers	Refused to accept wage cut for inferior product.	Adjusted. Accepted a compromise on prices for piecework.	Jan. 14	Jan. 16	12	2,685
Post office, Rochester, Pa	Threatened strike.	Carpenters	Protest against method of pay.	Adjusted. Will receive cash in envelopes each week as desired.	Jan. 8	Jan. 15	(1)	------
Shoe Board of Trade, Brooklyn, N. Y.	Strike	Shoe workers	Working conditions	Pending	Jan. 16	----------	(1)	------
Artistic Wire Forming Co., New York City.	---do---	Wire workers	Piecework scales cut, discharges, and working conditions.	Adjusted. Compromised; part of men reemployed.	Jan. 14	Feb. 7	80	20
Plumbers and steam fitters, Dayton, Ohio.	Controversy	Plumbers	Wages cut	Adjusted. Accepted $9.25 per day	Jan. 15	Jan. 29	50	125
Veterans' Home, Sawtelle, Calif.	---do---	Carpenters	Demand for payment of prevailing wage.	Pending	Jan. 6	----------	10	10
A. S. Birsh Co., New York City	Strike	Clothing workers	Sending work to outside shops.	---do---	Jan. 14	----------	200	------
Pincus-Tobias Shoe Co., Brooklyn, N. Y.	---do---	Shoe and leather workers.	Asked reinstatement of discharged worker.	---do---	Jan. 11	----------	122	150
Krasilovsky & Bro., New York City.	---do---	Safe movers, riggers, and helpers.	Asked 8-hour day, $9 for riggers and $7 per day for helpers.	---do---	Jan. 18	----------	40	------
Tuna fishermen, California coast	---do---	Fishermen	Asked $60 to $100 per ton for catching various species of tuna fish.	---do---	Jan. 16	----------	3,000	2,050
Pittsburgh Plate Glass Co., Philadelphia, Pa.	---do---	Glaziers	Failure to increase from $9 to $10 per day on Jan. 1, 1932.	Adjusted. Company agreed to pay $10 per day.	Jan. 8	Jan. 18	16	------

[1] Not reported.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF JANUARY, 1932—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
					1932	1932		
Anchor Post Fence Co., New York City.	Controversy	Ornamental-iron workers.	Alleged violation of agreement	Adjusted. Reached understanding and work continued.	Jan. 12	Jan. 29	18	------
Atlas Fence Co., Newark, N. J	------do	------do	------do	Pending	Jan. 1		20	------
Freedom Oil Works Building, Rochester, Pa.	Threatened strike.	Carpenters	Working conditions	Adjusted. Will receive pay in cash as requested.	Jan. 20	Jan. 21	(1)	------
Do	Controversy	Operating engineers	Wage scale	Pending	------do		2	------
Post office, Camden, N. J	------do	Carpenters	Failure to pay prevailing scale	Adjusted. Agreed to pay prevailing scale—50 cents per hour.	Jan. 15	Jan. 18	28	60
Post office, Uniontown, Pa	------do	Building trades	Prevailing wage scale	Adjusted. Prevailing wage rates for all crafts agreed upon.	Jan. 21	Feb. 3	200	300
Post office, Louisville, Ky	Threatened strike.	Ironworkers	Foreman demoted by subcontractor.	Adjusted. Foreman reinstated by contractor without loss of pay.	Jan. 14	Jan. 18	40	340
Y. M. C. A. Building, Harrisburg, Pa.	Strike	Bricklayers	Wage rates cut; will accept $1.25 per hour; contractor paid $1.	Pending	Jan. 20		35	------
Post office, Fort Wayne, Ind	------do	------do	Dispute between unions	Adjusted. Dispute satisfactorily settled and work continued.	Jan. 15		13	50
Post office, Greenfield, Ind	------do	------do	Subcontractor failed to pay wages due bricklayers.	Adjusted. General contractor agreed to pay the wages due.	------do	Jan. 20	10	10
Ladies' garment makers, Boston, Mass.	Threatened strike.	Garment makers	Proposed wage cut	Pending	------do		30,000	------
Philby Dress Co., New York City	Strike	Dressmakers and garment makers.	Asked increased rates on piecework.	------do	Jan. 18		21	4
Gold-Tee Knitting Mills, New York City.	------do	Knit-goods workers	1 discharged for incompetency	------do	Jan. 16		60	------
Diana Frocks (Inc.), Brooklyn, N. Y.	------do	Underwear and knit-goods workers.	Piecework rate cut from 7 to 15 per cent.	Unclassified. Plant moved away from Brooklyn.	------do	Feb. 4	175	160
Finkelhor Bros. (Inc.), New York City.	------do	Garment workers	Sending work to outside shops	Pending	Jan. 20		32	------
Dam No. 31, Ohio River near Portsmouth, Ohio.	Controversy	Building trades	Protest against low wages	------do	Jan. 10		(1)	------
Self-Mechanics Flooring Co. (Inc.), New York City.	Strike	Floormen and woodworkers.	Piecework rates cut 20 cents per 100 square feet.	------do	Jan. 23		20	1
My Favorite Dress Co. (Inc.), New York City.	------do	Operators, pressers, and finishers.	Asked increase in piecework	Adjusted. Operators allowed 5 cents increase on each dress, finishers 2 cents, and pressers 1 cent.	Jan. 22	Jan. 26	20	6
			Discharge of workers	Adjusted. Compromised; will reem-	Jan. 25	Feb. 4	20	5

Ariston Silversmith Corp., New York City.	----do----	Silversmiths----	Discharge of workers----	Adjusted. Compromised; will reemploy discharged workers when conditions warrant.	Jan. 25	Feb. 4	20	5
R. B. McDaniel, contractor on post-office building, Rochester, Pa.	----do----	Building----	Alleged failure to pay electricians prevailing rate.	Adjusted. Prevailing rate allowed and back wages paid.	Jan. 8	Jan. 26	(1)	----
Post office, Brownsville, Tex----	Controversy-	----do----	Demand for payment of prevailing rate.	Adjusted. Investigation made and rates fixed by conciliator and representative of War Department.	Jan. 1	Jan. 27	(1)	----
Building crafts, Norfolk, Va----	----do----	----do----	Wages cut from 7 to 20 per cent.	Pending----	Jan. 4	----	500	----
The Grace Steamship Lines, Brooklyn, N. Y.	Strike----	Longshoremen----	Wages cut from 85 to 70 cents per hour.	Adjusted. Cut withdrawn and existing agreement renewed.	Jan. 27	----	200	----
Post office, Cicero, Ill----	----do----	Glaziers----	Protest against nonunion subcontractor.	Adjusted. Nonunion contract canceled.	Jan. 26	Jan. 26	40	----
General Post Office, Brooklyn, N. Y.	Controversy-	Steel workers on metal lockers.	Jurisdiction; alleged violation of agreement.	Adjusted. Work awarded housesmiths and others called off this work by Treasury Department.	Jan. 25	Feb. 3	8	10
Total----	----	----	----	----	----	----	38,501	12,345

[1] Not reported.

LABOR AGREEMENTS, AWARDS, AND DECISIONS

Agreements

Railroad Labor Agreements of February 1, 1932

THE representatives of 20 of the railroad labor unions and of more than 200 railroads, including practically all of the first-class railroads of the United States, signed two agreements, January 31, 1932, one calling for a 10 per cent deduction in wages and the other dealing with employment conditions. Each of these agreements constitutes an agreement between each participating railroad and its employees represented by each participating railway organization which now has a contract with the railroad concerning rates of pay and working conditions

Agreement Regarding Wage Deduction

THE first of the agreements, terminating February 1, 1933, and providing for a 10 per cent deduction in wages, reads in full (with the exception of the appendixes) as follows:

"This agreement is entered into between the railroad companies, designated hereafter as 'participating railroads' and listed in Appendixes A, B, and C attached hereto and thereby made a part of this agreement, represented by the committee of railway presidents, signatory hereto, and the employees of the said participating railroads, represented by the chief executives of the respective organizations, signatory hereto, and is to be construed as an agreement by and between each participating railroad and its employees represented by each participating organization which now has a contract with the railroad concerning rates of pay, rules, and working conditions, and is included in the 'participating organizations' which are listed after the name of each participating railroad in the said Appendixes A, B, and C, attached hereto.

"It is understood and agreed that in the application, interpretation, or carrying out of this agreement each organization of employees, signatory hereto, will represent respectively, in the usual manner, the employees of each of the participating railroads for whom said organization has an existing contract, as evidenced in Appendixes A, B, and C.

"This agreement also is entered into by, and will apply to, the Pullman Co. and the Railway Express Agency, represented by the committee of railway presidents, and the respective employees thereof, represented, as to the Pullman Co., by the Order of Sleeping-Car Conductors, and as to the Railway Express Agency respectively, by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express, and Station Employees; International Association of Machinists; and International Brotherhood of Blacksmiths, Drop Forgers, and Helpers.

"The signatories hereto, having been duly authorized by the said participating railroads and the participating organizations of employees of said railroads, as heretofore described, to 'negotiate to a conclusion certain pending issues concerning unemployment and

wages,' hereby agree that 10 per cent shall be deducted from each pay check of each of the said employees covered by this agreement for a period of one year beginning February 1, 1932; that basic rates shall remain as at present; that this arrangement shall terminate automatically January 31, 1933; and further agree as follows:

"1. That the formal notices served by the participating railroads upon the participating organizations of employees for a 15 per cent reduction in present rates of pay shall be withdrawn and further proceedings thereunder discontinued;

"2. That the participating railroads, without attaching any limitation upon the use of funds derived from the pay-roll deduction herein agreed to, will make an earnest and sympathetic effort to maintain and increase railroad employment.

"The foregoing agreement is signed at Chicago, this 31st day of January, 1932, in behalf of the participating railroads and their employees represented as hereinbefore set forth, and is independent of any other agreement entered into by and between the parties hereto."

Agreement Regarding Employment Conditions

THE second agreement, effective to February 1, 1933, deals with the various proposals put forward by railroad labor for the purpose of relieving unemployment and stabilizing employment. The first three paragraphs of this agreement are identical with the corresponding paragraphs of the first agreement. Beginning with the fourth paragraph, the second agreement reads as follows:

"The signatories hereto, having been duly authorized by the said participating railroads and the participating organizations of employees of said railroads, as heretofore described, to 'negotiate to a conclusion certain pending issues concerning unemployment and wages,' hereby agree upon the disposition of the proposals of the employees concerning unemployment (set forth in Exhibit 1, attached hereto), as follows:

Item 1

"It is agreed that whatever may be practicable should be done to remove the feeling of uncertainty as to employment which may exist at the present time in the minds of many who are now employed, either upon a whole-time or part-time basis; and that varying conditions make it necessary to deal with this question by local negotiation on each railroad between each participating railroad and its employees, in the usual manner, through each participating organization; and that accordingly the railroads will carry on negotiations for the purpose of stabilizing employment for such periods and to such an extent as conditions may justify; it being understood that this agreement does not contemplate assurance of pay for service not performed unless covered by present agreements.

"The parties have been unable to reach any further agreement concerning the proposals of the employees as to stabilization of employment.

Item 2

"The parties have been unable to reach any agreement concerning the proposals of the employees as to applying the principle of the

6-hour day. The position of the committee of railroad presidents on this subject is stated as follows:

"For reasons which were fully explained by the chairman of our committee we find ourselves unable to accept your conclusions that the 6-hour day is necessary and that it must be instituted in order to absorb the existing number of experienced employees without reduction of compensation. Consequently, we would be unwilling to recommend the appointment at this time of a commission to determine ways and means of applying this principle to the different classes of employees.

Item 3

"(A) The parties have been unable to reach any agreement concerning the proposals of the employees as to joint action to promote a Federal bond issue for grade-crossing elimination. The position of the committee of railroad presidents on this subject is stated as follows:

"We doubt the wisdom of recommending to the Federal Congress at this time the appropriation of $1,000,000,000 for the purpose set forth in your program.

"The requirements of the several States as to the division of the cost of grade elimination are in our opinion in many instances inequitable. The employees can assist materially in seeking revised legislation providing for a more equitable division of expense of grade elimination between the public and the railroads, and we would be glad to have their cooperation in that connection.

"(B) It is agreed that there should be a fair and proper regulation of motors engaged in highway transportation and that no unfair or unjust burden should be placed upon transportation agencies of any character. It is believed that motor transportation now enjoys certain advantages which in effect are prejudicial to the railroads. The parties will be pleased to work together in developing desirable and fair Federal and State legislation covering highway transportation competitive with the railroads, such joint effort to include full consideration of the entire report of Examiner Flynn, which has been submitted to the Interstate Commerce Commission. The railroad presidents' committee will recommend to the participating railroads that consistent with the requirements of the service preference be given to furloughed railroad employees for employment by motor companies and freight-forwarding agencies when controlled by railroads, when additional men are required.

"The parties have been unable to reach any further agreement concerning the proposal of the employees as to regulation of motor transportation and freight-forwarding companies and provision for employment of furloughed employees therein.

"(C) The parties have been unable to reach any agreement concerning the proposal of the employees as to the protection of all interests in railroad consolidations. The position of the committee of railroad presidents on this subject is stated as follows:

"You will recall that this matter was very fully discussed at our conference, but owing to the conflicting viewpoints concerning certain phases of the subject as presented by you, and having in mind also that the subject is one concerning which railway executives are not in complete accord, we think it would be difficult if not impossible for us to reach any joint conclusion concerning the matter at this time.

"(D) It is agreed that the subjects of retirement insurance, elective workmen's compensation, and a dismissal wage will be studied by a joint committee composed of representatives of several of the participating railroads and a committee appointed by the Railway

Labor Executives Association, representing the participating organizations, which joint committee will report its findings promptly.

"The parties have been unable to reach any further agreement concerning the proposals of the employees as to the foregoing subjects. It is understood that agreement upon a study by a joint committee does not commit either party to accept or to await the results of this study.

"(E) It is agreed that regional employment bureaus will be established in connection with the Bureau of Information of the Eastern Railways, New York; Association of Western Railways, Chicago, and the Bureau of Information of the Southeastern Railways, Washington, each party to appoint representatives to confer as to details.

"(F) The parties have been unable to reach any agreement concerning the proposals of the employees as to coordination of train crews and train lengths. The position of the railroad presidents on this subject is stated as follows:

"With you, we believe that train lengths and train crews should be coordinated on the basis of economical and safe operation, but unfortunately it has not been easy to agree as to what is safe and what is economical operation. The two terms are relative rather than absolute. It is our conclusion that probably we would be unable to agree concerning this matter and consequently we doubt the wisdom of recommending to the railroad executives at this time joint effort in this connection as you suggest. The question is one which we think can best be dealt with by the employees and managers of the individual companies.

"(G) The parties have been unable to reach any agreement concerning the proposals of the employees as to the creation and use of pay-roll reserves. The position of the committee of railroad presidents on this subject is stated as follows:

"We favor, in principle, the policy of creating reserves, when earnings are good, to be available during periods of business depression. The use of such reserves, in our opinion, should not be restricted to any one purpose. It is unfortunate that existing conditions, with which you are familiar, make it impossible to set up reserves at this time.

Item 4

"The parties unite in expressing unqualified approval of wholehearted cooperation between management and employees and agree to do everything they can in support of this policy.

"This agreement shall continue in effect for one year; and thereafter subject to modification or abrogation by any participating road or any participating organization, so far as it affects such road or such organization, without prejudice to any other road or any other organization, by the serving of a 30-day written notice by either party upon the other.

"The foregoing agreement is signed at Chicago this 31st day of January, 1932, in behalf of the participating railroads and their employees represented as hereinbefore set forth, and is independent of any other agreement entered into by and between the parties hereto."

Exhibit 1.—Outline of Program of Railway Labor Executives' Association to Relieve Unemployment and to Stabilize Employment, November 19, 1931

The problem which railway labor must solve: (A) Insecure employment. Less than 50 per cent of necessary workers assured of continuing employment. (B) Diminishing employment. Thirty-three per cent fewer employees used to handle same traffic as 20 years ago. (C) Inadequate wages to provide reasonable living conditions and to protect against (*a*) disability (temporary or permanent), (*b*) unemployment. Four hundred thousand earning less than $20 per week; another 600,000 earning less than $30.

Insecure Employment

Seasonal character of traffic has always made employment insecure—and relief for older employees through seniority rules has been sought. But technological changes, reducing total volume of employment, have limited seniority protection to fewer and fewer employees.

The solution of this problem lies in stabilizing employment along two lines—

1. Where work can be budgeted for the year and spread evenly, an average force should be assured employment for one year and at least part-time employment should be assured to the stand-by force necessary for heavy-traffic periods. The maintenance of equipment and maintenance-of-way work are examples of work which can be budgeted to a large extent. Running repairs and inspection service, dependent on volume of traffic, may require treatment similar to transportation service.

2. Where the fluctuating and uncertain volume of traffic calls for expansion and contraction of forces somewhat irregularly, it should be possible to establish minimum forces assured of full employment for one year and the necessary stand-by forces assured of a certain amount of part-time employment in one year.

The workers who are normally required for the operation of a railroad must have as much assurance of a fixed compensation from their fixed investments in the enterprise as those who invest money for a fixed return. In fact the essential labor charge should be a first lien upon the revenues of any business. The insecure income of the worker-buyer is a greater menace to the good order and progress of society than the insecure income of the investor-seller.

The amount of seasonal employment on the railroads is not indicated in the averages of all railroads. Heavy movements of grain from the west, of fruits and vegetables from the south and from the west, of coal from the east and from the south; and movements of cotton, lumber, oil, manufactured goods, etc., from different parts of the country, occur in different months. Therefore, the total number of employees required by the industry is greater than the annual average number reported by the Interstate Commerce Commission and the fluctuations in employment on individual roads are far greater than indicated in the monthly averages reported.

If employment could be stabilized by a common program throughout the industry, the excessive number of men now furloughed by each road, who earn annually far less than even a living wage, could be materially reduced. Then it might be possible to create a mobile force of extra workers, shifting from one road to another somewhat as Pullman cars and freight cars are shifted to meet traffic requirements. Nothing less than a coordinated effort of all employers and employees could accomplish such an assurance of practically full-time employment for all experienced employees. But this achievement without an increase in rates of pay would raise considerably the actual average earnings of the employees, and would increase substantially the efficiency of labor, while decreasing the labor cost of all railroads, by reducing the turnover and improving the quality and morale of the employees.

There should be established a national placement bureau for the purpose of relocating railway employees separated from the service of a railroad because of permanent reductions of force and to provide for the temporary transfer of employees to extra work produced by seasonal or other temporary increases of traffic.

In order thus to stabilize employment without a vast amount of individual hardship it will be necessary to deal with the problem of diminishing employment so as to absorb between 200,000 and 300,000 unemployed men now dependent on the industry, but without reasonable expectation of reemployment even in a revival of past traffic volume.

Diminishing Employment

Technological changes, including the use of larger equipment and the constant substitution of machine power for man power, have eliminated jobs more rapidly than they could be recreated by increased traffic. It is reasonable to assume that further diminutions will result from future similar developments, and from the transfer of a part of rail transportation service to the motor transportation agencies.

In order to prevent unfair competition, motor transportation should be required to observe the same principles of safe, efficient, and socially just operation that have governed rail transportation. The rail managements and investors are particularly interested in a fair competition with money invested in the railroads.

The rail workers are particularly interested in a fair competition with labor invested in the railroads. Similar working conditions should prevail; and there is no reason why rail workers displaced by motor-transportation agencies should not be relocated in furnishing motor transportation services similar to those they are trained to perform on the railroads. The operating services, the maintenance and clerical services call for much the same general training in both fields.

The principal method of dealing with diminishing employment which should be adopted is shortening the hours of labor. The social advantage of this program is clear. Instead of adding employees to the ranks of the unemployed, an industry in which the productivity per employee is greatly increased can be called upon to shorten hours of work without reduction of annual earnings per employee.

Comparing 1910 and 1930, the employee of to-day handles over 50 per cent more traffic and produces twice as much surplus revenue over labor cost.

The establishment of the 8-hour day has demonstrated that improved methods and machinery and the increased efficiency of the workers permit of a shortened workday without reduction of average earnings and without a corresponding increase in the total pay roll.

It should, however, be recognized as more socially desirable to pay wages to workers than to pay returns on property. Unless costs of production can be materially reduced and displaced workers can be relocated, there is no social advance in the substitution of machine power for man power. Every industry should aim to reduce man power only by employing fewer new men and shortening work hours and not by discharging experienced workers. After such humane reductions of man power are accomplished an industry requiring fewer man-hours should reflect this increased productivity in higher wages for the reduced forces.

Inadequate Wages

A principal cause of inadequate wages in the railroad industry is part-time employment. A wholly false picture is presented by the wage statistics reported to the Interstate Commerce Commission. Thousands of train and engine service employees work only from four to eight months a year. Thousands of maintenance men (in the shops and on the right of way) are idle for a substantial part of the year. In the months of employment their wages may average about as reported but average earnings on the basis of $1,500 per year for only eight months of work equal only $1,000 per year.

The average number of hourly workers in 1929 was less than 1,600,000, but it is fair to estimate that at least 1,900,000 employees collected the $2,061,715,716 paid in wages. Thus the average compensation instead of $1,623 would be only $1,369. The stabilization of employment heretofore suggested would go far toward leveling up the present earnings of those now earning less than even a living wage.

Present provision to protect against temporary or permanent disability are largely either voluntary deductions from wages to pay for insurances or voluntary pension payments by some railroads. There should be (*a*) an elective Federal compensation law to indemnify against occupational accidents and diseases; (*b*) a Federal law to provide retirement insurance.

Such a compensation law would save a huge waste of money in litigation.

The retirement law would save the waste of continuing employment beyond the time of efficient service.

There should be a provision made for the payment of a dismissal wage in all cases of permanent dislocation of experienced employees.

There should also be worked out a provision for pay-roll reserves to take care of exceptional periods of reduced traffic, which would provide a workable and economical substitute for unemployment insurance. The stabilization of employment should operate to reduce this liability to a minimum.

These reserves should be created by an appropriation of surplus up to the amount estimated as necessary to maintain earnings of employees during periods of depression. In such periods hours of service could be reduced without reduction of earnings, with payment of added cost of employing same number of men for less traffic to be borne out of employment reserves. Thereby there would be no payments for idleness but increased payments for units of work—maintaining the total purchasing power with resulting public benefit.

Immediate Measures

In line with the principles of the foregoing permanent program immediate measures to relieve present distress can be proposed.

1. Stabilize employment by assuring one year of employment to the necessary employees in every class. (This will increase the purchasing power of a pay roll exceeding $2,000,000,000 by releasing over 1,250,000 workers from fear of unemployment.)

(*a*) This stabilization should include provisions for putting to work as many men as possible consistent with maintaining satisfactory conditions in the respective classes of employment.

(*b*) The necessary stand-by forces should also be assured of a minimum amount of part-time employment.

2. Since the 6-hour day is necessary and must be instituted to absorb the existing number of experienced employees without reduction of compensation, a commission should be created to determine the ways and means of applying this principle to the different classes of employees. Such a commission should be created by the nomination of an equal number of representatives of management and employees (including in the latter appropriate representatives of the principal classes of employment) with the designation of a chairman from its membership by the Interstate Commerce Commission. Any legislation necessary to establish the commission and to endow it with adequate authority to make a comprehensive study, as a basis for a report to be made within a definite period, should be sought by joint action so far as possible by the carriers and the employees.

3. Joint action should be undertaken between managements and employees to promote—

(*a*) One-billion-dollar United States bond issue for grade-crossing elimination on main traveled highways. One-half cost to be borne by Government as improvement of interstate highways. One-half cost to be borne by railroads to be repaid by payment of interest and sinking fund payment to retire bonds in 50 years.

(*b*) Regulation of motor transportation and freight forwarding companies; including provision for employment of furloughed railroad employees.

(*c*) Protection of all interests in railroad consolidation.

(*d*) Federal legislation to provide retirement insurance and elective workmen's compensation.

(*e*) Establishment of an emergency employment bureau to prepare the way for the eventual establishment of a national placement bureau and to provide means for placing unemployed rail workers as additional opportunities of employment may develop.

(*f*) Coordination of train crews and train lengths on the basis of economical, safe operation—including any desirable State or Federal legislation.

4. In order to carry forward the foregoing program, a continuing cooperation between railroad managements and railroad employees is essential. This will require complete willingness and good faith of railroad managements in dealing with the self-chosen representatives of railroad labor, and whole-hearted compliance with the spirit and the letter of the railway labor act.

Awards and Decisions

Recent Decisions of Industrial Commission of Colorado

Denial of Wage Reduction for Millmen in Denver

THE Industrial Commission of Colorado was notified, on November 14, 1931, by the Fleming Bros. Lumber Co., that the wages of its employees would be cut from 12½ to 20 per cent on December 14, 1931.

The secretary of Millmen's Union No. 1583 notified the commission of a protest by the union against a reduction in wages.

At a hearing held December 11, 1931, the secretary of the union testified that the average earnings of the members in the employ of the company was 80 cents an hour, or $6.40 a day.

On December 11, 1931, the commission disapproved the proposed reduction, and stated: "We do not believe that $6.40 per day under present conditions is too high a wage for men engaged in skilled employments."

Wage Reduction of Sheet-Metal Workers Approved

UNDER date of November 2, 1931, an agreement was entered into between the General Contractors Association of Denver, Colo., and other recognized contractors and the Building Trades Council of Denver. By the terms of this agreement a general reduction in wages of 12½ per cent was to be made. A number of employers in Denver notified the Industrial Commission of Colorado of their intention to put this agreement into effect by reducing the wages of their sheet-metal workers 12½ per cent.

The Sheet-Metal Workers Union, Local No. 9, filed a protest against the wage cut, and a hearing was held on January 5, 1932.

The commission, referring to the agreement of November 2, 1931, stated:

> In the opinion of this commission this is one of the best agreements that has been entered into in a trade dispute for some time. In this agreement it was agreed between both the Building Trades Council and the Denver General Contractors that a general reduction in wages of 12½ per cent would be made. There are many parts of this contract that should receive the attention of both the employers and the employees and we recommend that they read this contract.

On January 5, 1932, the commission rendered the following award:

> It is the award and decision of this commission that the petition of the employers for a 12½ per cent reduction in the wages of the sheet-metal workers be allowed, with the understanding that both the employees and the employers accept every part of the agreement entered into between the Denver General Contractors and the Building Trades Council of Denver under date of November 2, 1931, and that said agreement shall be binding on both employers and employees.

HOUSING

Building Permits in Principal Cities of the United States, January, 1932

BUILDING permit reports have been received by the Bureau of Labor Statistics of the United States Department of Labor from 345 identical cities having a population of 25,000 or over for the months of December, 1931, and January, 1932; and from 345 identical cities for the months of January, 1931, and January, 1932.

The cost figures as shown in the following tables apply to the costs of the buildings as estimated by the prospective builder on applying for his permit to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are shown. The States of Illinois, Massachusetts, New York, New Jersey, and Pennsylvania, through their departments of labor, are cooperating with the Federal bureau in the collection of these data.

Table 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 345 identical cities of the United States, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	December 1931	January, 1932	Per cent of change	December, 1931	January, 1932	Per cent of change
New England	$2,016,115	$1,186,900	−41.1	$2,436,483	$1,370,452	−43.8
Middle Atlantic	4,996,716	5,218,855	+4.4	17,795,846	11,160,002	−37.3
East North Central	1,531,727	1,031,551	−32.7	5,227,808	4,262,487	−18.5
West North Central	1,225,685	697,590	−43.1	3,064,821	910,078	−70.3
South Atlantic	1,148,123	1,501,650	+30.8	725,010	3,112,734	+329.3
South Central	1,041,562	847,768	−18.6	4,232,745	5,221,661	+23.4
Mountain and Pacific	2,791,415	2,315,705	−17.0	4,266,081	2,630,189	−38.3
Total	14,751,343	12,800,019	−13.2	37,748,794	28,667,603	−24.1

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	December, 1931	January, 1932	Per cent of change	December, 1931	January, 1932	Per cent of change	
New England	$831,589	$1,184,936	+42.5	$5,284,187	$3,742,288	−29.2	51
Middle Atlantic	4,105,540	3,521,175	−14.2	26,898,102	19,900,032	−26.0	70
East North Central	1,222,950	1,067,505	−12.7	7,982,485	6,361,543	−20.3	93
West North Central	946,406	427,788	−54.8	5,236,912	2,035,456	−61.1	24
South Atlantic	1,006,053	1,104,462	+9.8	2,879,186	5,718,846	+98.6	38
South Central	493,981	769,552	+55.8	5,768,288	6,838,981	+18.6	34
Mountain and Pacific	1,403,650	1,366,931	−2.6	8,461,146	6,312,825	−25.4	35
Total	10,010,169	9,442,349	−5.7	62,510,306	50,909,971	−18.6	345

Permits issued in these 345 cities during the month of January 1932, indicate a projected expenditure of $50,909,971, a decrease of 18.6 per cent as compared with the estimated cost of total building operations for which permits were issued during December, 1931. Decreases in the estimated cost of total building operations were shown in five of the seven geographic divisions. The smallest decrease (20.3 per cent) occurred in the East North Central States and the largest decrease (61.1 per cent) in the West North Central States. The South Central States and the South Atlantic States both registered increases, the increase in the South Atlantic States being nearly 100 per cent.

The estimated cost of new residential buildings decreased 13.2 per cent, comparing permits issued during the two months under discussion. Decreases were shown in five of the seven geographic divisions, ranging from 17.0 per cent in the Mountain and Pacific States to 43.1 per cent in the West North Central States. The Middle Atlantic States and the South Atlantic States showed increases.

New nonresidential buildings decreased 24.1 per cent in estimated expenditures, comparing December, 1931, with January, 1932. All geographic divisions showed decreases in this class of structure, except the South Atlantic and the South Central. In the South Atlantic States there was an increase of over 300 per cent, due to large Federal building contracts in the city of Washington.

The estimated cost of additions, alterations, and repairs decreased 5.7 per cent, comparing January permits with December permits. Four geographic divisions showed decreases in this class of operation and three showed increases.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 345 identical cities of the United States, by geographic divisions.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
New England	280	172	538	334	1,253	1,066	2,071	1,572
Middle Atlantic	520	464	1,160	855	2,867	3,148	4,547	4,467
East North Central	274	215	1,051	776	1,693	1,562	3,018	2,553
West North Central	287	167	402	244	613	557	1,302	968
South Atlantic	241	293	540	461	1,887	2,013	2,668	2,767
South Central	273	315	376	433	1,173	1,551	1,822	2,299
Mountain and Pacific	646	568	1,007	884	2,791	2,829	4,444	4,281
Total	2,521	2,194	5,074	3,987	12,277	12,726	19,872	18,907
Per cent of change	----------	−13.0	----------	−21.4	----------	+3.7	----------	−4.9

Permits were issued during January, 1932, for 18,907 building projects. This is 4.9 per cent less than the total number of building projects for which permits were issued during December, 1931. The number of new residential buildings decreased 13.0 per cent, and the number of new nonresidential buildings decreased 21.4 per cent, comparing these two months. The number of additions, alterations, and repairs, however, increased 3.7 per cent.

Table 3 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the estimated cost of such dwellings, for which permits were issued in 345 identical cities in December, 1931, and January, 1932, by geographic divisions.

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 345 IDENTICAL CITIES IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
New England	$1,281,815	$819,200	241	149	$228,800	$117,700	60	33
Middle Atlantic	2,056,586	1,925,755	350	316	1,186,130	801,600	286	226
East North Central	1,354,727	935,951	251	206	133,000	40,100	37	12
West North Central	1,047,235	637,090	274	158	70,450	49,500	22	16
South Atlantic	1,017,323	1,215,690	225	279	7,800	26,835	5	10
South Central	898,180	690,608	252	285	108,382	101,160	34	47
Mountain and Pacific	2,235,320	1,859,205	574	513	241,045	214,200	100	74
Total	9,891,186	8,083,499	2,167	1,906	1,975,607	1,351,095	544	418
Per cent of change		−18.3		−12.0		−31.6		−23.2

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
New England	$425,500	$250,000	143	76	$1,936,115	$1,186,900	444	258
Middle Atlantic	1,639,000	2,471,500	428	799	4,881,716	5,198,855	1,064	1,341
East North Central	44,000	55,500	16	11	1,531,727	1,031,551	304	229
West North Central	8,000	11,000	4	4	1,125,685	697,590	300	178
South Atlantic	105,000	259,125	46	84	1,130,123	1,501,650	276	373
South Central	35,000	56,000	17	25	1,041,562	847,768	303	357
Mountain and Pacific	315,050	242,300	139	108	2,791,415	2,315,705	813	695
Total	2,571,550	3,345,425	793	1,107	14,438,343	12,780,019	3,504	3,431
Per cent of change		+30.1		+39.6		−11.5		−2.1

During January, 1932, permits were issued for one thousand nine hundred and six 1-family dwellings to cost $8,083,499. This is 12 per cent fewer families than were to be provided for as compared with the December permits, while the estimated cost of the buildings was 18.3 per cent less than the estimated cost of the 1-family dwellings for which permits were issued in December. The number of families to be provided for in 2-family dwellings decreased 23.2 per cent and their estimated cost 31.6 per cent, comparing January permits with December permits. In contrast, the number of families provided for in apartment houses increased 39.6 per cent, comparing these two periods. The indicated expenditures for apartment houses increased 30.1 per cent. The total number of families provided for decreased 2.1 per cent, comparing January, 1932, with December, 1931, and the projected expenditures for all classes of housekeeping dwellings decreased 11.5 per cent.

Table 4 shows the index number of families provided for and the index numbers of indicated expenditures for new residential buildings, new nonresidential buildings, additions, alterations, and repairs, and for total building operations.

These indexes are worked on the chain system with the monthly average of 1929 equaling 100.

TABLE 4.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES, JANUARY, 1930, JANUARY AND DECEMBER, 1931, AND JANUARY, 1932

[Monthly average, 1929=100]

Month	Families provided for	Estimated cost of—			
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	Total building operations
1930					
January	34.2	29.4	64.3	55.1	46.1
1931					
January	39.1	30.8	43.4	55.5	38.9
December	14.7	11.8	32.9	27.3	22.3
1932					
January	14.4	10.2	25.0	25.8	18.2

The index number of families provided for and the index numbers of new residential buildings, new nonresidential buildings, additions, alterations, and repairs, and total building operations, were all lower for January, 1932, than for either January, 1930, January, 1931, or December, 1931.

Table 5 shows the number and value of contracts awarded for public buildings by the different agencies of the United States Government during the months of January and December, 1931, and January, 1932, by geographic divisions.

TABLE 5.—CONTRACTS LET FOR PUBLIC BUILDINGS BY DIFFERENT AGENCIES OF THE UNITED STATES GOVERNMENT DURING JANUARY AND DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	January, 1931		December, 1931		January, 1932 [1]	
	Number	Cost	Number	Cost	Number	Cost
New England	4	$42,460	7	$299,911	2	$230,653
Middle Atlantic	12	3,456,619	11	5,145,865	10	965,409
East North Central	9	211,303	9	358,476	9	656,322
West North Central	3	117,555	3	2,682,490	8	729,218
South Atlantic	21	2,346,752	28	406,979	19	2,377,347
South Central	7	427,216	15	767,962	7	611,727
Mountain and Pacific	21	932,679	29	2,248,129	31	945,614
Total	77	7,534,584	102	11,909,812	86	6,516,290

[1] Subject to revision.

During January, 1932, contracts were awarded by various Federal agencies for 86 building operations to cost $6,516,290. The value of these awards were lower than for either January, 1931, or December, 1931. These contracts were issued by the following Federal agencies: Office of the Quartermaster General, War Department; Bureau of Yards and Docks, Navy Department; Supervising Architect, Treasury Department; United States Veterans' Bureau; Office of Public Buildings and Public Parks; and the Corps of Engineers, War Department.

Table 6 shows the value of contracts awarded by the different State governments for public buildings during the months of January and December, 1931, and January, 1932, by geographic divisions.

TABLE 6.—CONTRACTS AWARDED FOR PUBLIC BUILDINGS BY THE DIFFERENT STATE GOVERNMENTS DURING JANUARY AND DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	January, 1931	December, 1931	January, 1932 [1]
New England	$44,540	$1,627,557	0
Middle Atlantic	588,293	7,835,287	$3,659,785
East North Central	268,871	2,308,755	1,380,877
West North Central	93,029	17,348	6,730
South Atlantic	246,925	383,100	668,204
South Central	247,000	462,172	3,891,569
Mountain and Pacific	164,141	217,128	1,289,443
Total	1,652,799	12,851,347	10,896,608

[1] Subject to revision.

Contracts awarded by the various State governments during January, 1932, totaled $10,896,608. This was lower than for December, 1931, but much higher than for January, 1931. Whenever a contract is awarded by the Federal Government or by a State government for a building in a city having a population of 25,000 or over, the number or cost of such building is included in the number and cost as shown in the several tables presented herewith.

TABLE 7.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	January, 1931	January, 1932	Per cent of change	January, 1931	January, 1932	Per cent of change
New England	$2,906,300	$1,186,900	−59.2	$1,206,672	$1,370,452	+13.6
Middle Atlantic	19,122,095	5,218,855	−72.7	16,628,065	11,160,002	−32.9
East North Central	4,253,951	1,031,551	−75.8	12,328,888	4,262,487	−65.8
West North Central	1,261,971	697,590	−44.7	2,372,889	910,078	−61.6
South Atlantic	2,245,450	1,501,650	−33.1	2,800,331	3,112,734	+11.2
South Central	2,996,744	850,268	−71.6	6,318,346	5,231,161	−17.2
Mountain and Pacific	5,521,621	2,313,705	−58.1	6,593,447	2,628,284	−60.1
Total	38,308,132	12,800,519	−66.6	48,248,638	28,675,198	−40.6

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	January, 1931	January, 1932	Per cent of change	January, 1931	January, 1932	Per cent of change	
New England	$1,294,491	$1,184,936	−8.5	$5,407,463	$3,742,288	−30.8	51
Middle Atlantic	9,983,829	3,521,175	−64.7	45,733,989	19,900,032	−56.5	70
East North Central	2,094,252	1,067,505	−49.0	18,677,091	6,361,543	−65.9	93
West North Central	463,327	427,788	−7.7	4,098,187	2,035,456	−50.3	24
South Atlantic	2,635,184	1,104,462	−58.1	7,680,965	5,718,846	−25.5	38
South Central	882,285	774,102	−12.3	10,197,375	6,855,531	−32.8	35
Mountain and Pacific	1,977,655	1,357,581	−31.4	14,092,723	6,299,570	−55.3	34
Total	19,331,023	9,437,549	−51.2	105,887,793	50,913,266	−51.9	345

Table 7 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building construction in 345 identical cities of the United States having a population of 25,000 or over, for the months of January, 1931, and January, 1932 by geographic divisions.

There was a decrease in indicated expenditures for new residential buildings in each of the seven geographic divisions. These decreases ranged from 33.1 per cent in the South Atlantic States to 75.8 per cent in the East North Central States. The decrease for the 345 cities as a whole was 66.6 per cent. New nonresidential buildings decreased 40.6 per cent in estimated cost. Two geographic divisions showed increases in this class of construction and five divisions showed decreases, comparing permits issued in January, 1932, with those issued in January, 1931.

The indicated expenditures for additions, alterations, and repairs decreased 51.2 per cent. All seven geographic divisions showed decreases in this class of building operation.

Total construction decreased 51.9 per cent in estimated cost comparing January, 1932, with January, 1931. Each geographic division showed a decrease in indicated expenditures for total construction during this period.

Table 8 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operation in 345 identical cities having a population of 25,000 or over for January, 1931, and January, 1932.

TABLE 8.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN JANUARY, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932
New England	271	172	292	334	1,004	1,066	1,567	1,572
Middle Atlantic	864	464	1,050	855	2,675	3,148	4,589	4,467
East North Central	589	215	1,153	776	2,171	1,562	3,913	2,553
West North Central	268	167	382	244	628	557	1,278	968
South Atlantic	381	293	575	461	2,079	2,013	3,035	2,767
South Central	800	316	549	436	1,578	1,552	2,927	2,304
Mountain and Pacific	1,065	567	1,370	878	3,467	2,803	5,902	4,248
Total	4,238	2,194	5,371	3,984	13,602	12,701	23,211	18,879
		—48.2		—25.8		—6.6		—18.7

Comparing January, 1932, permits with January, 1931, permits, decreases were shown in the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total construction.

Table 9 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the cost of such dwellings, for which permits were issued in 345 identical cities during January, 1931, and January, 1932, by geographic divisions.

TABLE 9.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 345 IDENTICAL CITIES IN JANUARY, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

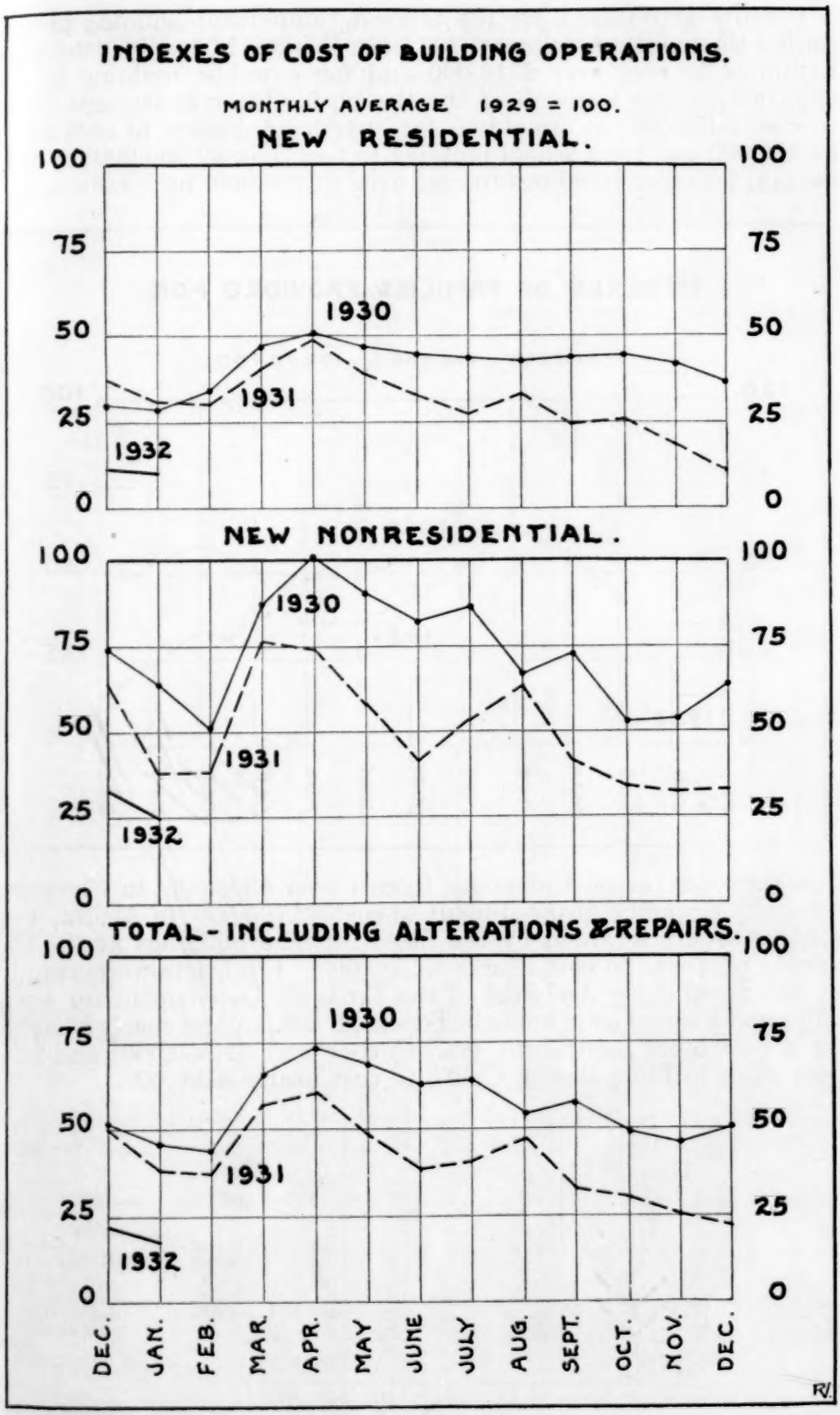
Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932
New England	$1,370,700	$819,200	213	149	$346,200	$117,700	86	33
Middle Atlantic	3,672,145	1,925,755	592	316	1,463,700	801,600	373	226
East North Central	2,668,931	935,951	508	206	497,500	40,100	108	12
West North Central	1,001,221	637,090	241	158	145,250	49,500	38	16
South Atlantic	1,742,950	1,215,690	358	279	59,600	26,835	28	10
South Central	2,081,293	693,108	647	286	595,806	101,160	205	47
Mountain and Pacific	3,633,821	1,857,205	924	512	499,250	214,200	181	74
Total	16,171,061	8,083,999	3,483	1,906	3,607,306	1,351,095	1,019	418
Per cent of change		−50.0		−45.3		−62.5		−59.0

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932	January, 1931	January, 1932
New England	$1,189,400	$250,000	238	76	$2,906,300	$1,186,900	537	258
Middle Atlantic	13,486,100	2,471,500	2,781	799	18,621,945	5,198,855	3,746	1,341
East North Central	722,520	55,500	237	11	3,888,951	1,031,551	853	229
West North Central	115,500	11,000	40	4	1,261,971	697,590	319	178
South Atlantic	407,900	259,125	188	84	2,210,450	1,501,650	574	373
South Central	319,145	56,000	140	25	2,996,244	850,268	992	358
Mountain and Pacific	1,106,750	242,300	433	108	5,239,821	2,313,705	1,538	694
Total	17,347,315	3,345,425	4,057	1,107	37,125,682	12,780,519	8,559	3,431
Per cent of change		−80.7		−72.7		−65.6		−59.9

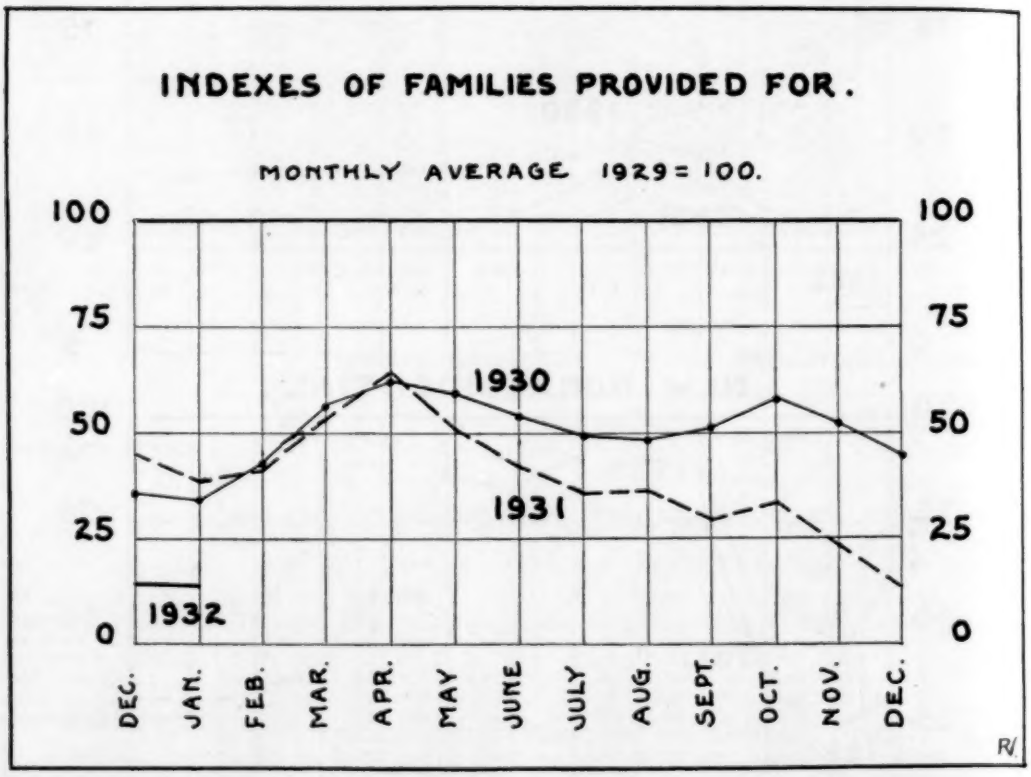
The number of families provided for in 1-family dwellings, 2-family dwellings, multifamily dwellings, and the cost of such construction, all showed decreases, comparing permits issued in January, 1932, with those issued in January, 1931, in these 345 cities. The total number of families provided for in these cities decreased 59.9 per cent, comparing these two months, while the cost of the structures in which they were to be housed decreased 65.6 per cent.

Table 10 shows the estimated cost of new residential buildings, of new nonresidential buildings, of total building operations, together with the number of family dwelling units provided for in new buildings, in the 345 cities from which reports were received for both December, 1931, and January, 1932.

No reports were received from New London (Conn.), Bangor (Me.), Marion (Ind.), Lima (Ohio), Pensacola (Fla.), Lynchburg (Va.), Lexington (Ky.), Port Arthur (Tex.), San Bernardino (Calif.), Butte (Mont.), and Everett (Wash).


INDEXES OF COST OF BUILDING OPERATIONS.
MONTHLY AVERAGE 1929 = 100.
NEW RESIDENTIAL.
100
75
50
25
0
1930
1931
1932
NEW NONRESIDENTIAL.
TOTAL - INCLUDING ALTERATIONS & REPAIRS.
DEC.
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.

Permits were issued for the following important building projects during the month of January, 1932: In Boston, Mass., for two school buildings to cost over $316,000 and for a public building to cost $350,000; in the Borough of the Bronx, for three apartment houses to cost $620,000; in Brooklyn, for apartment houses to cost nearly $1,500,000 and for a school building to cost over $2,000,000; in Manhattan, for office buildings to cost over $3,500,000; in Syracuse, for a



building at Syracuse University to cost over $200,000; in Cleveland, for a city sewerage disposal plant to cost $2,700,000; in Austin, Tex., contracts were awarded by the State for nine buildings at the University of Texas to cost nearly $3,500,000. Contracts were awarded by the Supervising Architect of the Treasury Department for a post office and Federal courthouse in Topeka, Kans., to cost nearly $650,000; for a post office in Atlanta, Ga., to cost over $1,500,000; and for a post office in Long Beach, Calif., to cost nearly $400,000.

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERTIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS

New England States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Connecticut:								
Bridgeport	$70,300	$56,300	21	18	$7,574	$4,575	$90,572	$81,705
Bristol	6,000	0	1	0	1,225	550	11,942	3,340
Greenwich	24,000	80,000	3	6	39,900	4,100	77,950	128,000
Hartford	76,300	38,800	15	9	5,365	373,224	113,860	592,836
Meriden	26,200	5,500	7	2	11,850	1,702	41,915	11,652
New Britain	51,000	0	7	0	11,890	800	69,432	8,877
New Haven	58,000	40,300	9	7	38,275	35,400	141,245	99,885
Norwalk	69,500	38,000	11	9	11,100	18,100	96,706	65,305
Stamford	56,000	4,500	9	2	7,780	2,475	83,980	19,975
Torrington	17,000	0	5	0	1,350	5,310	21,125	10,060
Waterbury	10,500	6,000	2	2	12,000	700	24,050	8,700
West Hartford [1]	----------	305,600	-------	6	----------	600	----------	307,980
Maine:								
Lewiston	0	7,000	0	2	0	6,300	7,000	13,300
Portland	35,500	19,300	5	4	3,400	1,135	47,804	39,085
Massachusetts:								
Arlington [1]	----------	22,500	-------	3	----------	0	----------	23,100
Beverly	20,200	14,800	5	3	1,150	300	29,200	24,550
Boston [2]	495,000	303,000	151	78	1,986,402	735,180	2,644,859	1,295,604
Brockton	24,500	21,500	6	4	1,435	1,675	32,994	30,835
Brookline	52,000	61,500	3	7	3,450	22,000	67,065	343,075
Cambridge	0	16,000	0	4	2,250	0	11,200	40,935
Chelsea	0	0	0	0	6,000	1,075	10,508	3,350
Chicopee	24,000	5,500	5	1	1,175	1,700	28,275	9,400
Everett	10,000	0	3	0	675	7,500	17,075	7,850
Fall River	3,500	4,300	2	1	10,885	475	21,380	8,390
Fitchburg	10,700	3,000	2	1	1,000	2,535	29,000	7,385
Haverhill	2,200	0	2	0	900	275	6,275	2,705
Holyoke	0	14,000	0	2	0	600	6,850	15,850
Lawrence	0	0	0	0	14,650	450	16,825	8,250
Lowell	4,650	10,000	1	2	975	1,025	11,250	14,485
Lynn	19,000	4,000	5	1	7,000	7,475	53,140	40,035
Malden	33,865	19,900	10	5	665	500	43,257	30,500
Medford	35,100	30,500	7	7	6,525	1,750	45,650	34,465
New Bedford	0	0	0	0	1,700	725	25,250	6,175
Newton	160,000	106,500	20	10	12,650	900	227,565	115,145
Pittsfield	37,500	14,800	10	2	97,625	200	150,025	25,175
Quincy	65,600	40,800	17	11	10,685	4,475	87,347	52,181
Revere	4,000	0	1	0	0	750	7,400	7,975
Salem	5,000	6,000	1	1	4,375	32,330	22,025	43,580
Somerville	0	0	0	0	29,635	3,525	38,585	6,920
Springfield	51,600	1,800	14	1	9,550	4,775	91,260	16,650
Taunton	0	3,700	0	3	700	1,275	3,805	22,246
Waltham	6,500	10,500	1	2	1,765	1,225	12,990	18,745
Watertown	21,000	3,000	5	1	2,850	1,600	24,225	5,100
Worcester	67,300	66,300	14	15	17,000	3,675	176,930	96,810
New Hampshire:								
Concord	0	5,500	0	4	1,000	900	2,535	7,400
Manchester	17,000	18,900	3	5	710	615	35,250	34,066
Rhode Island:								
Central Falls	0	0	0	0	1,022	0	1,572	0
Cranston	88,700	36,800	22	9	6,225	2,050	98,725	46,055
East Providence	39,000	4,800	8	1	18,325	1,135	67,225	13,817
Newport	4,500	5,000	1	1	4,100	7,300	17,771	15,570
Pawtucket	116,100	0	9	0	3,160	650	122,990	4,130
Providence	97,300	58,800	21	15	15,310	63,236	166,378	200,374
Woonsocket	0	0	0	0	1,250	225	1,950	3,790
Vermont:								
Burlington [1]	----------	14,500	-------	2	----------	0	----------	15,100
Total	2,016,115	1,186,900	444	258	2,436,483	1,370,452	5,284,187	3,742,288
Per cent of change	----------	−41.1	-------	−41.9	----------	−43.8	----------	−29.2

[1] Schedule received for the first time, January, 1932; not included in totals. [2] Applications filed.

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

Middle Atlantic States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
New Jersey:								
Atlantic City	$5,000	$1,500	1	1	$500	0	$25,332	$49,490
Bayonne	0	9,000	0	3	575	$1,700	2,425	16,300
Belleville	18,500	10,500	4	3	3,900	1,610	23,200	13,610
Bloomfield	85,000	42,000	17	9	4,000	1,500	99,000	46,500
Camden	0	0	0	0	44,419	17,000	52,234	20,432
Clifton	68,500	38,000	17	9	10,350	4,900	84,750	45,115
East Orange	6,000	13,300	1	3	5,225	1,050	26,260	18,244
Elizabeth	23,000	15,000	5	3	1,800	2,500	24,800	17,500
Garfield	3,500	0	1	0	400	825	10,175	4,575
Hackensack [1]		10,500		3		17,363		74,862
Hoboken	0	0	0	0	0	0	67,510	11,070
Irvington	38,550	12,000	8	3	11,065	59,820	61,400	73,220
Jersey City	6,500	0	2	0	9,650	60,685	28,100	76,735
Kearny	12,000	6,000	1	2	3,100	9,550	15,525	21,350
Montclair	41,280	41,500	3	4	14,350	2,825	69,720	62,325
Newark	129,500	96,500	29	19	302,522	26,220	484,798	386,588
New Brunswick	8,500	2,500	2	1	50	13,335	59,125	18,443
Orange	6,536	0	1	0	0	5,550	6,536	8,043
Passaic	4,800	0	1	0	18,150	650	35,625	10,030
Paterson	25,800	23,200	6	6	24,200	2,900	77,600	58,880
Perth Amboy	0	0	0	0	2,700	2,550	4,200	9,050
Plainfield	4,800	45,000	1	1	675	1,250	6,825	51,150
Trenton	5,000	13,700	1	3	23,560	10,785	76,288	34,987
Union City	0	0	0	0	650,000	0	654,886	14,010
West New York	0	0	0	0	350	500	6,933	12,900
West Orange [1]		58,000		8		441,248		499,758
New York:								
Albany	153,100	145,400	13	8	1,885	142,450	203,684	312,295
Amsterdam	0	0	0	0	4,860	15,500	4,860	15,500
Auburn	7,000	4,500	1	1	317,605	475	373,862	6,285
Binghamton	8,400	21,200	2	1	8,320	5,615	42,390	70,145
Buffalo	94,700	84,600	21	33	57,925	157,827	199,735	293,707
Elmira	0	9,000	0	2	3,570	343,370	16,253	359,715
Jamestown	7,400	10,700	2	3	1,075	1,125	11,950	20,065
Kingston	13,300	5,000	4	1	2,425	190,891	24,389	202,291
Lockport	51,800	0	14	0	52,776	800	104,576	6,905
Mt. Vernon	0	10,000	0	1	2,775	13,850	18,937	37,790
Newburgh	27,300	0	4	0	1,400	0	32,550	21,150
New Rochelle	77,100	32,400	5	5	1,850	4,900	80,500	43,250
New York City:								
The Bronx [2]	851,000	868,790	176	259	415,150	101,200	1,622,505	1,174,639
Brooklyn [2]	1,536,000	2,020,000	376	576	7,582,003	2,843,740	9,879,756	5,292,876
Manhattan [2]	0	0	0	0	116,850	5,699,800	933,126	6,521,250
Queens [2]	749,700	817,900	169	215	674,619	193,668	2,025,375	1,247,445
Richmond [2]	121,400	156,550	40	41	79,555	12,973	226,817	602,573
Niagara Falls	28,400	13,500	8	3	6,799	14,990	50,449	38,045
Poughkeepsie	56,500	37,000	8	6	1,263,575	0	1,330,275	42,700
Rochester	42,100	20,850	8	5	20,400	6,835	102,915	55,445
Schenectady	73,500	0	14	0	7,525	1,350	90,740	28,474
Syracuse	45,300	66,200	10	13	24,050	553,507	124,710	641,462
Troy	72,600	50,200	8	9	49,750	2,010	135,050	55,455
Utica	43,000	14,000	8	2	750	750	45,150	16,775
Watertown	4,500	4,000	1	1	2,750	5,625	12,265	18,355
White Plains	37,000	14,000	2	2	15,300	1,685	71,950	43,360
Yonkers	110,000	166,500	16	26	13,021	38,695	155,416	226,895
Pennsylvania:								
Allentown	2,000	10,500	1	1	104,039	184,225	125,389	235,954
Altoona	5,200	0	2	0	5,013	1,835	11,978	9,476
Bethlehem	0	0	0	0	1,200	575	3,850	1,725
Butler	0	0	0	0	4,000	0	4,000	17,000
Chester	0	0	0	0	1,600	0	7,200	4,000
Easton	0	10,000	0	1	275	1,300	13,560	17,600
Erie	48,100	44,800	14	12	5,550	17,675	290,690	75,980

[1] Schedule received for the first time, January, 1932; not included in totals. [2] Applications filed.

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

Middle Atlantic States—Continued

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new dwellings		New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Pennsylvania—Con.								
Harrisburg	0	0	0	0	$545	$8,859	$22,930	$46,939
Hazleton	$5,000	0	1	0	30,980	2,990	39,720	10,338
Johnstown	5,400	0	2	0	2,350	695	12,650	2,625
Lancaster	12,000	$8,500	3	2	12,150	0	31,825	18,750
McKeesport	0	0	0	0	17,050	325	20,165	4,359
Nanticoke	1,950	9,000	1	2	0	0	1,950	9,000
Newcastle	13,800	6,800	2	3	750	1,400	14,550	8,510
Norristown	0	0	0	0	540	2,662	3,585	6,752
Philadelphia	4,500	24,500	1	3	677,855	127,565	990,985	421,950
Pittsburgh	134,400	92,200	16	19	5,041,555	179,300	5,228,317	328,495
Reading	20,000	20,000	1	2	2,550	35,000	39,905	71,510
Scranton	24,000	22,475	6	4	4,470	2,175	40,015	74,405
Wilkes-Barre	3,000	12,090	1	4	5,200	3,148	28,467	20,181
Wilkinsburg	3,500	11,000	1	3	0	0	4,700	14,026
Williamsport	0	0	0	0	2,920	7,507	4,454	15,254
York	10,000	5,000	1	2	15,150	1,430	33,785	9,809
Total	4,996,716	5,218,855	1,064	1,341	17,795,846	11,160,002	26,898,102	19,900,032
Per cent of change	----------	+4.4	-------	+26.0	----------	−37.3	----------	−26.0

East North Central States

Illinois:								
Alton	0	0	0	0	$675	$100	$17,674	$14,065
Aurora	$4,500	0	1	0	16,455	2,985	25,670	9,985
Belleville	1,500	$18,600	1	4	850	0	3,850	19,200
Berwyn	12,000	0	2	0	710	400	13,410	1,900
Bloomington	2,000	2,000	1	1	0	2,000	3,000	4,000
Chicago	90,000	86,350	15	15	2,420,205	333,835	2,674,988	596,645
Cicero	0	0	0	0	4,200	0	4,200	60
Danville	0	0	0	0	9,250	0	16,750	1,825
Decatur	3,000	475	1	1	10,600	1,250	21,660	5,000
East St. Louis	2,500	4,700	1	2	950	7,375	7,125	20,425
Elgin	5,000	5,000	1	1	9,875	500	22,177	6,430
Evanston	20,000	0	2	0	7,500	1,000	59,000	22,500
Granite City	0	0	0	0	0	0	0	0
Joliet	0	5,000	0	1	3,000	0	14,850	14,200
Maywood	0	0	0	0	79,333	0	80,608	1,000
Moline	15,000	4,000	3	1	465	300	20,448	5,448
Oak Park	18,000	0	1	0	402,560	250	426,060	1,320
Peoria	91,500	52,800	14	13	783,990	2,200	882,290	61,600
Quincy	4,600	0	2	0	84,462	27,772	91,362	27,842
Rockford	3,000	13,000	1	3	4,100	3,050	14,010	31,900
Rock Island	4,000	4,000	1	1	480	0	6,878	5,553
Springfield	47,805	32,800	9	7	28,617	8,755	85,238	48,947
Waukegan	26,000	6,000	7	1	10,800	1,500	38,120	10,150
Indiana:								
Anderson	5,200	3,300	2	2	5,525	1,750	13,515	6,300
East Chicago	0	0	0	0	180,720	0	183,998	1,700
Elkhart	2,000	7,500	1	2	1,515	90	4,905	10,041
Evansville	0	5,900	0	2	25,265	16,370	28,182	25,571
Fort Wayne	5,600	12,900	1	2	89,934	12,290	105,761	38,266
Gary	7,000	9,000	2	2	0	150	12,550	9,200
Hammond	5,000	0	1	0	747	200	14,447	9,900
Indianapolis	98,950	60,550	19	14	11,640	19,306	138,979	109,939
Kokomo	0	0	0	0	440	3,775	1,271	7,205
Lafayette	7,300	3,500	4	2	0	0	11,100	3,500
Michigan City	2,000	0	1	0	50	120	5,800	320
Mishawaka	0	0	0	0	1,150	3,505	1,230	3,755
Muncie	1,000	4,800	1	2	37,622	1,793	45,243	11,592
Richmond	0	0	0	0	2,950	0	5,800	2,500
South Bend	0	7,000	0	1	1,265	5,785	7,255	23,205
Terre Haute	0	0	0	0	2,300	325	7,930	2,849

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings					
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Michigan:								
Ann Arbor	0	$17,800	0	2	$1,255	$300	$10,556	$33,540
Battle Creek	0	4,860	0	5	5,800	10,150	13,835	20,370
Bay City	0	2,500	0	1	56,300	1,122	58,410	5,927
Dearborn	$19,500	23,000	5	4	2,650	615	23,350	24,265
Detroit	172,200	95,100	33	20	77,523	179,316	375,085	358,806
Flint	26,447	7,356	7	2	17,839	10,420	61,231	24,146
Grand Rapids	30,400	3,000	7	1	33,125	15,135	74,355	23,425
Hamtramck	0	0	0	0	650	0	1,625	3,450
Highland Park	0	0	0	0	495	8,350	3,220	12,395
Jackson	2,800	0	1	0	5,565	265	8,546	2,650
Kalamazoo	5,500	0	2	0	4,585	2,925	16,502	13,644
Lansing	5,000	0	1	0	28,450	1,735	37,550	2,120
Muskegon	0	0	0	0	575	125	8,280	1,265
Pontiac	0	0	0	0	2,235	490	3,010	11,060
Port Huron	2,050	0	2	0	300	500	5,425	500
Royal Oak [1]		0		0		680		680
Saginaw	8,200	4,500	2	2	625	950	9,735	10,060
Wyandotte	9,200	1,800	2	1	159,332	0	169,362	4,700
Ohio:								
Akron	8,800	15,900	3	3	4,320	6,300	17,360	35,214
Ashtabula	19,000	0	2	0	1,308	2,515	21,218	2,920
Canton	0	0	0	0	1,105	225	1,905	1,540
Cincinnati	272,650	262,760	48	52	120,845	104,525	447,880	516,798
Cleveland	77,500	49,500	15	10	46,950	2,752,750	272,925	2,901,900
Cleveland Heights	24,200	27,500	4	5	1,330	1,355	30,265	98,965
Columbus	12,000	18,300	2	3	45,450	32,500	86,800	83,700
Dayton	36,000	14,500	5	4	24,144	13,787	125,327	40,422
East Cleveland	0	0	0	0	350	2,200	1,620	4,330
Elyria	3,000	4,500	1	1	905	2,075	5,030	6,675
Hamilton	4,000	3,550	1	2	950	135	6,945	5,770
Lakewood	8,500	4,000	2	1	10,425	1,625	21,909	8,500
Lorain	12,500	3,700	2	1	575	700	13,075	4,400
Mansfield	9,000	1,200	1	1	400	60,405	9,910	62,220
Marion	0	0	0	0	2,150	0	2,900	0
Massillon	0	0	0	0	76,600	125	76,675	125
Middletown	0	4,800	0	1	34,496	33,746	35,809	41,421
Newark	3,500	0	2	0	3,850	480	7,350	955
Norwood	0	0	0	0	0	37,300	650	38,145
Portsmouth	0	0	0	0	75	0	370	500
Springfield	9,000	0	2	0	850	18,325	11,475	20,200
Steubenville	0	0	0	0	6,900	300	7,775	2,050
Toledo	13,000	6,700	1	3	88,860	2,476	281,329	21,016
Warren	0	0	0	0	500	590	6,455	3,390
Youngstown	9,800	0	2	0	2,210	377,527	16,840	386,672
Wisconsin:								
Appleton	6,700	0	2	0	775	335	48,375	2,135
Eau Claire	19,500	0	4	0	3,550	14,400	25,367	14,400
Fond du Lac	0	8,500	0	3	990	4,905	4,110	14,905
Green Bay	6,500	13,500	2	3	13,965	800	24,890	19,575
Kenosha	0	9,000	0	2	24,245	1,080	28,415	13,280
Madison	31,900	13,500	7	3	34,236	6,352	68,736	21,972
Milwaukee	142,150	47,200	30	10	30,910	32,780	214,164	132,436
Oshkosh	13,275	0	5	0	2,540	265	23,215	6,225
Racine	7,000	5,000	1	1	1,175	10,750	13,575	17,300
Sheboygan	16,500	0	3	0	995	725	22,200	6,766
Superior	0	4,000	0	1	1,375	40,285	1,980	83,165
West Allis	0	4,850	0	1	0	6,715	250	13,365
Total	1,531,727	1,031,551	304	229	5,227,808	4,262,487	7,982,485	6,361,543
Per cent of change		−32.7		−24.7		−18.5		−20.3

[1] Schedule received for the first time, January, 1932; not included in totals.

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

West North Central States

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new dwellings		New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Iowa:								
Burlington	0	0	0	0	$200	$500	$1,250	$1,750
Cedar Rapids	$22,200	$14,250	8	3	11,332	1,845	59,227	21,205
Council Bluffs	1,000	1,500	1	1	1,300	2,300	2,800	9,300
Davenport	17,000	4,000	5	2	610	3,495	22,572	11,737
Des Moines	74,800	16,500	15	3	9,185	3,435	87,710	66,035
Dubuque	24,000	8,200	6	3	2,348	28,225	34,249	38,427
Ottumwa	5,000	7,500	1	1	16,500	500	53,600	27,500
Waterloo	17,100	0	4	0	71,835	2,005	90,165	13,255
Kansas:								
Hutchinson	8,900	20,000	4	7	2,620	200	11,760	21,665
Kansas City	4,700	4,500	4	3	2,000	2,980	9,175	9,655
Topeka	4,700	20,000	3	1	4,615	643,883	24,505	667,848
Wichita	23,575	12,350	9	4	15,160	6,485	47,443	30,260
Minnesota:								
Duluth	26,500	4,000	7	1	7,520	13,200	65,240	29,435
Minneapolis	354,325	170,685	93	50	855,235	72,460	1,247,550	295,865
St. Paul	104,160	83,520	21	15	44,696	240	269,827	119,641
Missouri:								
Joplin	3,000	0	2	0	0	1,000	7,869	3,900
Kansas City	80,500	115,500	23	27	5,200	39,000	437,800	165,000
Springfield	9,000	11,850	2	5	1,710,585	5,010	1,805,190	23,925
St. Joseph	13,500	0	5	0	745	110	18,055	3,180
St. Louis	170,100	151,500	44	41	38,980	68,200	287,135	393,805
Nebraska:								
Lincoln	133,100	9,100	10	2	3,295	2,390	140,755	17,588
Omaha	94,900	37,200	24	8	101,410	5,300	210,285	45,275
North Dakota:								
Fargo	20,500	0	5	0	500	0	28,800	4,580
South Dakota:								
Sioux Falls	13,125	5,435	4	1	158,950	7,315	273,950	14,625
Total	1,225,685	697,590	300	178	3,064,821	910,078	5,236,912	2,035,456
Per cent of change		−43.1		−40.7		−70.3		−61.1

South Atlantic States

Delaware:								
Wilmington	$16,800	$8,000	4	2	$20,665	$276,100	$49,736	$315,711
District of Columbia:								
Washington	578,500	953,500	118	193	280,488	774,505	1,016,546	2,004,240
Florida:								
Jacksonville	39,500	17,825	12	13	9,105	26,595	94,860	62,710
Miami	28,300	10,650	9	9	11,200	19,220	90,395	55,285
Orlando	0	5,500	0	2	2,720	0	9,105	10,791
St. Petersburg	19,000	3,000	1	3	1,300	700	41,244	11,400
Tampa	1,650	7,800	3	4	24,340	4,215	50,778	32,373
Georgia:								
Atlanta	24,900	48,400	12	16	10,057	1,719,406	69,073	1,802,517
Augusta	3,390	3,925	4	4	1,454	2,280	10,131	19,208
Columbus	3,500	2,500	3	1	475	1,250	9,287	7,545
Macon	16,500	300	1	1	900	700	45,331	5,309
Savannah	16,200	480	5	1	1,100	260	17,400	3,565
Maryland:								
Baltimore	168,000	222,000	29	50	138,200	136,900	668,000	803,500
Cumberland	0	0	0	0	725	1,470	1,675	17,871
Hagerstown	4,500	8,000	3	2	445	655	5,270	11,855
North Carolina:								
Asheville	2,400	0	2	0	125	255	7,110	4,020
Charlotte	22,050	35,900	4	7	90	3,190	28,511	45,631
Durham	4,900	1,900	2	2	2,000	0	8,720	3,525
Greensboro	4,900	3,150	2	3	36,285	1,745	73,314	12,272
High Point	15,000	0	7	0	9,375	3,975	31,375	4,450
Raleigh	8,300	600	5	1	12,555	785	21,555	1,895
Wilmington	15,100	0	4	0	7,200	0	33,300	39,000
Winston-Salem	900	0	1	0	445	965	22,684	21,628
South Carolina:								
Charleston	5,500	3,300	2	4	21,350	800	31,842	12,531
Columbia	29,100	4,950	9	5	81,510	1,630	144,045	17,738
Greenville	11,550	9,000	3	1	1,125	0	14,340	19,350
Spartanburg	0	0	0	0	1,000	3,650	2,055	9,852

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

South Atlantic States—Continued

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new dwellings		New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Virginia:								
Newport News	$4,133	$9,450	2	6	$1,165	$2,164	$11,319	$16,530
Norfolk	22,500	58,900	8	14	3,900	25,572	58,835	98,812
Petersburg	3,200	0	2	0	40	80	3,240	530
Portsmouth	0	17,300	0	6	850	575	6,725	21,380
Richmond	11,000	24,300	4	7	19,867	26,528	64,883	75,668
Roanoke	16,000	22,125	4	8	503	2,305	22,666	31,580
West Virginia:								
Charleston	49,350	1,500	10	1	8,439	1,580	81,094	13,945
Clarksburg	1,500	0	1	0	400	475	2,500	2,515
Huntington	0	700	0	1	1,225	2,248	3,535	5,253
Parkersburg	0	3,000	0	1	8,287	59,696	17,257	72,291
Wheeling	0	13,695	0	5	4,100	10,260	9,450	24,570
Total	1,148,123	1,501,650	276	373	725,010	3,112,734	2,879,186	5,718,846
Per cent of change		+30.8		+35.1		+329.3		+98.6

South Central States

Alabama:								
Birmingham	$2,600	$13,960	3	9	$3,650	$6,775	$18,840	$54,012
Mobile	11,000	5,900	6	3	27,075	4,100	43,897	17,849
Montgomery	14,800	7,900	11	8	2,135	1,035	26,335	23,590
Arkansas:								
Little Rock	8,000	5,500	5	2	867,806	1,775	892,287	18,657
Kentucky:								
Ashland	0	1,000	0	1	0	600	3,700	5,410
Covington	0	0	0	0	135,845	610	140,320	7,967
Louisville	67,500	14,500	7	5	28,790	32,800	106,615	85,800
Newport	0	0	0	0	20,400	400	23,100	5,800
Paducah	3,000	0	1	0	11,500	850	14,500	850
Louisiana:								
Baton Rouge	11,300	5,700	3	5	655	468	18,947	17,758
New Orleans	33,550	75,043	14	14	11,505	9,046	92,194	145,939
Shreveport	3,500	5,100	4	2	372,432	375	389,296	20,589
Mississippi:								
Jackson	9,890	19,815	5	8	0	0	12,173	33,915
Oklahoma:								
Enid	11,100	0	3	0	485	3,000	14,760	4,110
Muskogee [1]		2,500		1		9,500		16,550
Oklahoma City	76,000	44,700	11	12	751,889	713,435	833,499	798,535
Okmulgee	0	0	0	0	150	236,855	150	236,930
Tulsa	60,840	6,100	13	2	6,937	17,440	82,203	40,546
Tennessee:								
Chattanooga	34,000	15,000	2	6	12,700	27,000	68,025	86,708
Johnson City	500	1,000	1	1	4,500	0	5,800	1,000
Knoxville	4,800	17,340	2	5	5,220	28,560	15,780	48,528
Memphis	6,500	30,550	5	12	13,910	10,660	104,000	106,470
Nashville	10,200	19,950	5	12	1,364,500	34,375	1,392,653	95,482
Texas:								
Amarillo	31,375	5,685	11	5	8,791	15,600	43,241	22,985
Austin	24,039	86,010	22	43	49,813	3,392,458	81,924	3,511,636
Beaumont	1,000	7,100	1	2	1,462	1,768	40,499	27,467
Brownsville [1]		2,000		1		0		4,675
Dallas	64,000	84,925	29	41	230,895	28,980	366,740	272,034
El Paso	9,700	0	3	0	4,085	8,480	17,175	19,258
Fort Worth	178,550	68,884	21	29	43,825	18,815	255,963	118,732
Galveston	18,950	29,865	8	13	62,723	13,109	87,521	58,795
Houston	273,650	186,000	66	66	73,500	119,887	354,040	316,137
San Angelo	0	7,350	0	4	1,060	0	2,675	8,835
San Antonio	77,218	59,191	41	35	336,313	35,692	445,591	112,584
Waco	5,000	23,700	4	12	2,765	48,713	9,115	79,373
Wichita Falls	0	0	0	0	0	408,000	4,465	434,700
Total	1,041,562	847,768	303	357	4,232,745	5,221,661	5,768,288	6,838,981
Per cent of change		−18.6		+17.8		+23.4		+18.6

[1] Schedule received for the first time, January, 1932; not included in totals.

TABLE 10.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 345 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN DECEMBER, 1931, AND JANUARY, 1932, BY GEOGRAPHIC DIVISIONS—Continued

Mountain and Pacific States

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new dwellings		New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932	December, 1931	January, 1932
Arizona:								
Phoenix	$36,500	$38,000	10	9	$115,340	$1,903	$158,220	$46,718
Tucson	13,900	10,240	8	7	2,800	1,900	31,678	23,005
California:								
Alameda	7,000	10,400	2	2	1,465	838	19,475	18,822
Alhambra	41,500	31,000	14	8	275	725	46,075	39,400
Bakersfield	9,100	7,950	3	2	2,190	89,505	27,500	104,665
Berkeley	13,200	41,900	5	13	1,235	14,715	30,756	79,877
Fresno	13,750	10,150	6	4	3,750	160,585	51,963	196,286
Glendale	222,800	97,250	44	25	11,400	8,225	245,525	115,945
Huntington Park [1]	----------	9,300	-------	3	----------	400	----------	12,750
Long Beach	87,550	65,800	32	22	270,365	522,242	385,125	636,332
Los Angeles	1,076,669	757,735	357	257	1,150,501	692,632	2,674,723	1,884,671
Oakland	104,250	107,150	30	28	29,280	83,770	198,367	242,544
Pasadena	72,400	53,700	11	12	225,173	68,218	320,759	148,536
Riverside	28,800	9,900	5	4	61,285	100,832	95,824	119,473
Sacramento	62,500	60,450	13	9	23,860	10,075	114,887	97,613
San Diego	139,300	98,650	39	38	132,558	44,483	416,914	205,492
San Francisco	346,750	399,450	84	103	242,472	231,966	729,240	730,502
San Jose	27,695	32,335	6	7	18,600	215,010	67,180	268,075
Santa Ana	8,500	34,800	2	7	3,400	20,463	17,318	60,207
Santa Barbara	28,950	2,000	8	1	118,601	1,905	151,381	13,255
Santa Monica	39,876	21,800	12	11	38,484	70	81,240	31,383
Stockton	24,700	28,000	7	5	430,313	4,385	458,578	46,157
Vallejo	2,500	0	1	0	0	680	5,554	6,874
Colorado:								
Colorado Springs	3,300	6,875	3	2	2,150	5,442	8,430	16,162
Denver	111,500	155,000	26	29	33,340	30,800	182,990	297,930
Pueblo	0	6,200	0	3	855	5,405	5,755	14,875
Montana:								
Great Falls	12,900	0	3	0	150	750	17,900	5,885
New Mexico:								
Albuquerque	24,500	12,000	10	4	18,955	5,450	57,015	24,600
Oregon:								
Portland	64,450	46,050	15	14	1,197,453	201,460	1,363,855	399,845
Salem	0	3,570	0	4	660	35	5,042	10,731
Utah:								
Ogden	0	0	0	0	700	0	1,200	16,500
Salt Lake City	17,425	0	6	0	19,146	2,325	75,049	25,985
Washington:								
Bellingham	7,500	8,800	3	5	14,900	0	24,910	9,960
Seattle	111,250	126,550	40	46	42,200	72,520	250,012	285,000
Spokane	16,400	16,000	4	5	7,620	1,350	42,016	23,810
Tacoma	14,000	16,000	4	9	44,605	29,525	98,690	65,710
Total	2,791,415	2,315,705	813	695	4,266,081	2,630,189	8,461,146	6,312,825
Per cent of change	----------	−17.0	-------	−14.5	----------	−38.3	----------	−25.4

Hawaii

Honolulu	$107,387	$111,754	39	65	$167,391	$232,200	$288,617	$358,279
Per cent of change	----------	+4.1	-------	+66.7	----------	+38.7	----------	+24.1

[1] Schedule received for the first time, January, 1932; not included in totals.

Building Permits in Principal Cities, 1931: General Summary

THE Bureau of Labor Statistics presents in this article summary data as to building permits for 311 identical cities having a population of 25,000 or over, for which reports were received for the calendar years 1930 and 1931.

In studying the following tables it should be borne in mind that the costs shown include the costs of the buildings only; no land costs are included. The costs are as stated by the prospective builder in applying for his permit to build. Reports cover only the corporate limits of the cities enumerated. The States of Illinois, Massachusetts, New York, New Jersey, and Pennsylvania, through their departments of labor, are cooperating with the Bureau of Labor Statistics in the collection of these data.

Table 1 shows the estimated cost of new residential buildings, new nonresidential buildings, additions, alterations, and repairs, and of total building operations in 311 identical cities of the United States having a population of 25,000 or over, by geographic divisions, for the calendar years 1930 and 1931.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 311 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN 1930 AND 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings				New nonresidential buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings			
	1930	1931	1930	1931	1930	1931
New England	$46,241,528	$36,447,870	7,211	6,757	$75,602,766	$61,998,899
Middle Atlantic	250,055,101	206,090,707	48,641	44,837	308,847,779	253,145,275
East North Central	123,125,354	51,068,272	20,480	10,234	190,442,123	129,912,385
West North Central	31,448,130	23,589,173	7,210	6,198	53,331,944	42,823,966
South Atlantic	37,971,134	40,241,944	7,609	8,644	74,347,354	50,334,018
South Central	48,245,833	27,444,163	13,673	8,439	79,662,664	52,817,954
Mountain and Pacific	88,813,906	56,924,447	25,679	16,950	97,643,772	57,555,087
Total	625,900,986	441,806,576	130,503	102,059	879,878,402	648,587,584
Per cent of change, 1930 to 1931		−29.4		−21.8		−26.3

Geographic division	Additions, alterations, and repairs, estimated cost		Total construction, estimated cost			Number of cities
	1930	1931	1930	1931	Per cent of change	
New England	$27,074,582	$19,617,078	$148,918,876	$118,063,847	−20.7	49
Middle Atlantic	98,536,667	77,597,736	657,439,547	536,833,718	−18.3	67
East North Central	47,642,176	33,794,882	361,209,653	214,775,539	−40.5	78
West North Central	15,480,609	11,156,682	100,260,683	77,569,821	−22.6	24
South Atlantic	23,562,663	21,533,385	135,881,151	112,109,347	−17.5	34
South Central	16,843,397	11,183,257	144,751,894	91,445,374	−36.8	31
Mountain and Pacific	31,225,184	22,185,572	217,682,862	136,665,106	−37.2	28
Total	260,365,278	197,068,592	1,766,144,666	1,287,462,752	−27.1	311
Per cent of change, 1930 to 1931		−24.3				

Permits issued in these 311 cities during the calendar year 1931 indicate an expenditure for total building operations of $1,287,462,752. This is 27.1 per cent less than the estimated cost of all building operations in these cities during the calendar year 1930. Decreases

in total building operations were shown in each of the seven geographic divisions, ranging from 17.5 per cent in the South Atlantic States to 40.5 per cent in the East North Central States.

There was a decrease in the estimated cost of new residential buildings in these 311 cities of 29.4 per cent, comparing the year 1931 with the year 1930. The South Atlantic was the only geographic division showing an increase in residential buildings. The decreases in the other six geographic divisions ranged from a low of 17.6 per cent in the Middle Atlantic States to a high of 58.5 per cent in the East North Central States.

Estimated expenditures for new nonresidential buildings decreased 26.3 per cent in 1931, as compared with 1930. The seven geographic divisions each showed decreases in this class of structure. The smallest decrease, 18.0 per cent, was shown in both the New England and Middle Atlantic States. The highest decrease, 41.1 per cent, was shown in the Mountain and Pacific States.

Estimated costs of additions, alterations, and repairs decreased 24.3 per cent, comparing the year 1931 with the year 1930. Decreases occurred in each of the seven geographic divisions. The South Atlantic States showed the smallest percentage of decrease, 8.6, while the South Central States showed the largest percentage of decrease, 33.6.

Table 2 shows the value of contracts awarded for public buildings by the different agencies of the United States Government and by the different State governments for the calendar year 1931, by geographic divisions.

TABLE 2.—CONTRACTS FOR PUBLIC BUILDINGS LET BY THE UNITED STATES GOVERNMENT AND BY STATE GOVERNMENTS, CALENDAR YEAR 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	Contracts let by—	
	Federal Government	State governments
New England	$10,980,717	$10,562,680
Middle Atlantic	25,829,946	45,525,601
East North Central	24,900,101	8,445,942
West North Central	8,322,441	5,489,203
South Atlantic	35,889,204	4,415,778
South Central	17,425,064	4,617,261
Mountain and Pacific	17,755,172	4,876,424
Total	141,102,645	83,932,889

During the calendar year, 1931, the agencies of the Federal Government from which reports were received awarded contracts for building operations to cost $141,102,645. The contracts were issued by the following Federal agencies: United States Capitol Architect; Bureau of Yards and Docks, Navy Department; Supervising Architect, Treasury Department; United States Veterans' Bureau; and the Office of Public Buildings and Public Parks. The contracts awarded by the various State governments during the year 1931 totaled $83,932,889.

The cost of contracts by the Federal Government or by State governments for buildings in cities having a population of 25,000 or over is included in Tables 1 and 3.

Table 3 shows the estimated cost of new residential buildings, new nonresidential buildings, and total building operations, together with the number of families provided for in each of the 311 cities for the calendar years 1930 and 1931.

Reports were received from 49 cities in the New England States; from 67 cities in the Middle Atlantic States; from 78 cities in the East North Central States; from 24 cities in the West North Central States; from 34 cities in the South Atlantic States; from 31 cities in the South Central States; and from 28 cities in the Mountain and Pacific States.

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY

New England States

State and city	New residential buildings				Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and repairs	
	Estimated cost		Families provided for in new dwellings					
	1930	1931	1930	1931	1930	1931	1930	1931
Connecticut:								
Bridgeport	$1,447,475	$1,723,750	353	449	$732,573	$570,370	$2,618,360	$2,753,354
Greenwich	2,860,200	1,191,500	203	104	769,605	633,000	4,335,820	2,239,760
Hartford	623,300	546,100	61	116	4,299,898	2,986,675	6,364,738	4,846,875
Meriden	282,900	212,850	64	45	327,122	879,343	817,396	1,205,773
New Britain	313,600	170,700	42	27	406,310	678,344	896,082	999,902
New Haven	1,587,800	2,729,150	238	166	13,621,153	6,153,846	15,924,143	9,490,991
New London	456,680	294,500	70	56	2,605,555	1,960,873	3,138,116	2,326,043
Norwalk	1,296,750	941,650	165	160	736,222	120,108	2,365,723	1,443,818
Stamford	971,100	685,700	109	108	1,292,545	150,140	2,621,458	1,035,450
Waterbury	474,100	322,700	101	80	1,217,324	656,202	2,037,374	1,186,827
Maine:								
Bangor	155,100	216,600	46	62	377,650	213,387	560,375	465,262
Lewiston	151,000	158,700	31	39	1,010,600	97,925	1,199,900	335,575
Portland	480,480	404,510	110	93	690,586	598,581	1,567,156	1,254,239
Massachusetts:								
Boston [1]	6,226,700	7,462,760	1,415	1,796	12,927,294	21,454,786	26,906,300	33,968,003
Brockton	395,400	368,050	69	76	417,720	278,864	1,113,417	829,989
Brookline	2,294,500	1,229,500	231	93	952,460	506,565	3,687,061	1,907,681
Cambridge	5,547,143	1,057,850	159	137	4,402,047	3,201,639	11,062,711	4,991,235
Chelsea	26,500	76,700	6	16	108,895	179,375	202,535	393,338
Chicopee	167,200	106,800	57	31	115,360	421,689	354,935	590,314
Everett	183,600	148,900	53	45	1,185,385	1,189,001	1,532,490	1,447,251
Fall River	119,490	28,700	33	9	856,786	515,499	1,188,691	697,105
Fitchburg	108,500	66,950	22	18	732,950	25,361	879,320	262,286
Haverhill	111,975	45,600	38	22	108,835	225,800	340,860	362,689
Holyoke	208,000	188,000	37	24	1,205,620	401,800	1,702,995	766,175
Lawrence	70,000	67,100	19	14	307,137	526,523	617,922	892,476
Lowell	179,900	203,450	42	41	581,530	261,280	1,146,909	626,875
Lynn	507,600	707,985	103	122	1,924,066	433,320	2,972,201	1,520,597
Malden	453,500	602,465	99	147	498,305	195,007	1,133,275	984,609
Medford	1,280,200	1,403,500	249	315	247,660	719,875	1,656,066	2,242,522
New Bedford	123,000	82,500	15	14	654,593	210,750	982,463	471,230
Newton	3,666,400	3,348,450	346	368	1,223,298	1,193,002	5,870,127	4,881,874
Pittsfield	994,150	758,250	185	157	678,118	481,379	1,854,171	1,623,306
Quincy	1,187,125	891,600	288	224	1,204,848	416,035	2,723,641	1,782,920
Revere	233,500	124,500	58	32	163,950	53,435	702,101	279,675
Salem	330,600	389,100	56	68	426,415	186,310	1,162,440	942,223
Somerville	165,500	197,700	49	51	932,877	560,805	1,380,406	979,765
Springfield	1,200,600	798,275	284	192	3,719,508	1,769,350	5,703,263	2,948,114
Taunton	95,650	45,750	27	17	56,719	189,241	596,841	385,627
Waltham	577,900	433,850	124	84	1,085,110	174,665	1,806,011	856,763
Watertown	437,100	603,500	84	98	437,270	1,127,590	964,360	1,840,400
Worcester	1,603,425	1,301,950	294	225	3,437,872	3,716,175	6,341,063	5,591,791
New Hampshire:								
Manchester	250,260	185,450	86	68	270,925	333,985	764,802	825,633
Rhode Island:								
Central Falls	65,500	38,100	22	11	58,680	17,892	164,545	101,457
Cranston	1,222,300	1,008,800	273	227	291,470	597,198	1,596,555	1,668,848
East Providence	728,775	459,825	133	92	301,065	372,051	1,273,938	990,858
Newport	563,600	205,900	45	45	302,410	268,220	1,186,545	633,260
Pawtucket	679,600	464,150	149	75	833,745	304,680	1,847,125	961,700
Providence	3,073,500	1,681,000	446	282	4,720,480	3,620,519	10,742,334	7,912,695
Woonsocket	62,350	66,500	22	16	144,220	170,439	311,816	318,694
Total, New England	46,241,528	36,447,870	7,211	6,757	75,602,766	61,998,899	148,918,876	118,063,847
Per cent of change		−21.2		−6.3		−18.0		−20.7

[1] Applications filed.

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY—Continued

Middle Atlantic States

State and city	New residential buildings: Estimated cost		Families provided for in new dwellings		Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and rerepairs	
	1930	1931	1930	1931	1930	1931	1930	1931
New Jersey:								
Atlantic City	$149,150	$216,673	29	50	$264,615	$130,327	$1,400,607	$842,991
Bayonne	230,800	35,500	104	16	448,050	299,373	791,750	447,774
Bloomfield	1,483,500	1,010,500	344	213	733,500	465,200	2,460,000	1,557,300
Camden	486,900	124,300	159	52	1,651,272	816,315	2,582,097	1,130,140
Clifton	1,088,150	911,500	247	208	336,770	301,679	1,492,435	1,296,519
East Orange	504,900	253,450	85	46	1,694,938	726,656	2,627,236	1,411,280
Elizabeth	842,000	628,000	222	157	1,514,900	1,714,900	2,383,900	2,347,900
Hoboken	27,500	100,000	4	40	280,025	239,810	827,763	567,297
Irvington	449,850	442,112	102	99	1,164,780	975,373	1,700,480	1,749,092
Jersey City	888,000	605,800	238	183	10,407,265	690,146	12,167,252	1,990,778
Kearny	404,000	267,300	103	67	393,427	458,398	842,832	758,993
Montclair	930,950	1,094,440	69	99	654,170	146,246	1,939,867	1,387,100
Newark	3,542,190	1,701,300	750	357	6,657,138	2,612,017	12,379,194	6,455,993
New Brunswick	97,400	99,833	21	16	630,590	40,856	970,260	407,532
Orange	662,500	85,856	96	9	567,620	119,268	1,527,847	487,271
Passaic	163,500	57,500	24	12	1,526,972	208,935	2,098,698	604,165
Paterson	583,500	417,750	139	99	722,619	557,630	2,088,193	1,547,540
Perth Amboy	144,950	97,570	32	20	853,227	48,674	1,245,477	237,587
Plainfield	656,334	719,550	81	92	727,842	375,711	1,643,295	1,341,833
Trenton	203,700	404,150	38	50	1,810,527	1,471,767	2,448,741	2,420,861
Union City	170,000	115,000	41	57	487,300	733,698	887,265	1,074,899
West New York	16,000	36,800	2	14	114,700	19,800	241,025	181,798
New York:								
Albany	2,834,700	1,916,490	311	217	4,720,555	3,279,082	9,004,273	6,060,801
Amsterdam	128,000	100,200	26	17	838,175	82,565	991,900	219,815
Auburn	496,150	173,200	39	28	567,290	2,860,801	1,134,013	3,145,221
Binghamton	677,130	370,675	161	90	1,003,563	108,008	2,255,199	969,397
Buffalo	3,493,465	3,212,475	1,072	1,029	9,975,375	5,102,529	14,824,861	9,338,432
Elmira	740,150	135,917	40	32	864,424	778,533	1,826,173	1,099,546
Jamestown	415,962	144,700	93	36	152,260	441,380	782,854	739,769
Kingston	217,800	232,400	41	52	453,115	640,527	862,132	1,032,894
Mount Vernon	2,922,900	2,095,100	481	303	679,713	1,394,530	4,197,164	3,818,877
Newburgh	153,850	104,800	23	18	844,417	1,350,458	1,217,847	1,536,445
New Rochelle	3,112,646	2,788,050	191	228	1,698,479	641,121	5,668,994	4,340,041
New York—								
The Bronx [1]	29,348,900	35,937,452	7,012	8,537	19,563,659	25,606,925	56,115,642	65,399,250
Brooklyn [1]	41,545,100	43,941,875	9,275	10,837	18,761,510	19,334,126	70,631,906	75,534,443
Manhattan [1]	59,269,000	18,873,000	8,669	2,585	107,533,888	94,267,255	198,445,431	137,371,067
Queens [1]	44,779,260	53,985,538	10,495	12,716	26,357,323	15,352,899	77,343,961	76,754,035
Richmond [1]	3,169,125	3,684,090	731	1,061	3,156,563	2,764,736	7,628,849	7,805,281
Niagara Falls	905,775	707,290	218	164	1,900,533	172,860	3,735,648	1,249,013
Poughkeepsie	351,900	484,000	48	66	63,582	1,929,395	744,667	2,572,308
Rochester	2,356,940	1,192,400	262	166	4,252,329	4,227,737	8,011,253	6,303,172
Schenectady	1,351,300	477,975	169	90	3,481,290	433,055	5,338,906	1,299,668
Syracuse	2,501,900	1,345,300	432	260	1,709,818	4,007,180	5,398,534	6,999,959
Troy	542,250	1,236,090	99	121	2,239,961	682,755	3,023,593	2,201,274
Utica	563,350	425,250	90	82	517,821	466,023	1,349,917	1,134,236
Watertown	58,800	93,325	14	22	147,005	37,030	434,825	266,121
White Plains	3,138,100	2,010,369	297	276	2,466,249	4,032,530	6,179,319	6,334,160
Yonkers	7,078,600	6,937,165	1,042	1,021	2,037,532	2,520,710	9,887,352	10,013,915
Pennsylvania:								
Allentown	858,400	277,200	97	45	750,855	427,569	2,270,422	968,261
Altoona	477,550	129,871	75	35	616,503	465,150	1,369,459	745,356
Bethlehem	379,125	220,700	69	35	531,770	120,375	1,065,400	442,569
Butler	63,075	13,100	21	4	78,000	31,650	197,022	78,250
Chester	124,400	49,000	34	19	817,636	563,275	1,139,061	681,320
Easton	244,700	59,167	15	6	121,007	58,238	568,981	184,867
Erie	1,150,400	888,900	209	221	1,287,461	944,874	3,302,453	2,711,048
Harrisburg	845,750	848,958	77	55	1,037,681	631,637	2,518,808	2,001,061
Hazleton	210,512	94,718	27	22	177,944	348,691	498,278	548,771
Johnstown	91,800	70,050	18	16	323,170	418,460	695,520	605,368
Lancaster	634,300	106,400	43	28	489,705	165,643	1,380,976	537,823
Lebanon	143,400	105,500	12	29	528,525	31,900	744,625	153,450
McKeesport	442,400	281,150	83	54	317,608	177,878	1,051,533	631,890
New Castle	325,000	153,250	49	30	126,050	47,315	521,895	246,885
Norristown	479,200	199,295	80	36	633,255	440,795	1,331,052	781,978
Philadelphia	8,902,100	5,298,975	1,744	1,028	34,850,059	26,006,815	53,141,770	35,265,216
Pittsburgh	6,620,135	4,050,735	1,349	919	9,955,505	12,578,887	20,729,727	19,386,135

[1] Applications filed.

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY—Continued

Middle Atlantic States—Continued

State and city	New residential buildings				Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and repairs	
	Estimated cost		Families provided for in new dwellings					
	1930	1931	1930	1931	1930	1931	1930	1931
Pennsylvania—Con.								
Reading	$740,250	$383,100	119	49	$1,190,406	$1,940,422	$2,473,571	$2,772,226
Scranton	373,125	281,924	49	63	2,061,820	587,712	3,189,548	1,377,650
Wilkes-Barre	152,602	71,174	39	37	1,225,594	751,057	1,668,716	1,170,036
Wilkinsburg	392,750	143,500	79	31	217,714	77,040	842,215	347,217
Williamsport	247,000	73,930	36	20	860,117	386,203	1,278,302	618,555
York	278,300	260,100	56	45	1,020,718	276,160	1,678,736	792,003
Total, Middle Atlantic	250,055,101	206,090,707	48,641	44,837	308,847,779	253,145,275	657,439,547	536,833,718
Per cent of change		−17.6		−7.8		−18.0		−18.3

East North Central States

Illinois:								
Alton	$377,623	$160,073	58	22	$432,017	$151,849	$1,096,697	$479,793
Aurora	411,594	181,002	82	35	715,296	1,032,065	1,401,762	1,404,177
Belleville	481,850	283,070	107	81	241,952	110,960	748,892	421,610
Bloomington	374,000	130,000	68	26	278,648	557,700	700,648	711,700
Chicago	25,871,750	6,624,630	2,741	966	54,615,250	54,121,650	85,749,167	66,693,556
Cicero	373,300	155,300	57	23	533,641	821,035	1,117,349	1,070,903
Danville	199,693	62,600	47	18	85,835	58,500	378,347	280,954
Decatur	408,900	280,600	79	45	1,476,245	427,430	1,991,015	781,190
East St. Louis	696,430	366,204	207	140	542,310	584,884	1,364,613	1,052,463
Elgin	354,050	228,940	72	44	245,758	236,015	735,716	611,257
Evanston	939,000	551,000	63	36	1,308,250	1,928,500	3,103,450	3,251,250
Joliet	590,500	334,800	88	50	1,415,915	357,119	2,471,040	1,024,864
Moline	530,770	259,750	112	61	660,158	122,689	1,381,154	506,962
Oak Park	455,300	331,400	55	27	1,203,350	797,450	1,861,455	1,249,283
Peoria	1,832,550	1,176,780	408	259	1,152,840	931,212	3,436,495	2,515,070
Quincy	624,400	64,700	68	24	373,474	1,358,505	1,031,674	1,446,665
Rockford	1,233,200	277,700	341	73	997,560	70,037	2,907,530	647,062
Rock Island	454,100	177,750	132	52	158,141	249,229	1,328,208	593,935
Springfield	654,150	670,687	151	156	2,063,963	1,147,014	3,179,424	2,329,262
Indiana:								
Anderson	400,550	152,570	51	43	131,844	42,100	610,162	311,715
East Chicago	159,026	11,200	37	3	1,447,418	513,318	1,801,145	604,954
Elkhart	203,440	72,900	43	16	209,814	127,698	527,274	290,986
Evansville	667,050	366,685	174	97	675,959	589,622	1,761,184	1,187,550
Fort Wayne	1,554,425	739,450	313	155	1,065,377	2,132,909	3,099,086	3,187,530
Gary	519,800	198,300	131	56	334,360	634,120	1,176,840	982,885
Hammond	596,580	155,480	152	40	1,077,611	3,059,498	1,875,733	3,314,474
Indianapolis	2,737,430	2,006,800	615	399	3,447,740	6,535,572	7,451,293	9,338,800
Kokomo	49,070	11,500	17	4	92,329	95,744	262,965	245,673
Marion	33,550	19,380	18	12	236,375	51,665	393,204	146,631
Muncie	152,267	76,300	47	34	172,132	262,074	443,863	449,434
Richmond	223,050	92,000	76	25	321,340	493,800	621,652	646,000
South Bend	1,390,950	216,025	193	54	1,995,485	962,364	3,708,609	1,328,615
Terre Haute	188,000	50,250	50	18	281,890	53,492	686,610	227,507
Michigan:								
Battle Creek	271,300	106,200	72	27	3,590,215	573,290	3,963,605	742,177
Bay City	306,500	196,000	54	57	505,342	835,165	1,269,864	1,618,960
Detroit	22,755,238	10,569,547	4,084	2,135	19,074,600	8,739,477	48,369,293	23,435,193
Flint	1,664,663	740,804	360	128	1,776,198	902,197	3,993,708	1,965,673
Grand Rapids	861,900	399,100	231	113	1,151,835	402,150	2,921,975	1,147,250
Hamtramck	78,700	6,000	21	2	1,066,410	45,810	1,298,536	120,785
Highland Park	337,000	8,500	5	1	179,225	36,135	624,440	117,290
Jackson	286,500	94,075	61	17	108,750	225,948	697,792	409,580
Kalamazoo	468,725	238,000	102	65	466,451	684,859	1,171,550	1,084,828
Lansing	533,189	175,975	137	43	1,157,696	801,767	2,064,747	1,209,057
Muskegon	234,450	76,800	81	28	721,382	307,002	1,195,423	448,612
Pontiac	175,340	10,000	50	6	1,000,720	261,040	1,280,121	341,399
Port Huron	73,550	99,525	32	47	32,565	194,385	149,290	352,585
Saginaw	566,517	151,760	193	58	1,758,291	222,962	2,690,423	485,270
Ohio:								
Akron	4,919,330	514,775	372	105	2,989,455	586,205	8,776,754	1,938,716
Ashtabula	105,900	61,850	29	17	153,730	100,706	344,835	219,028
Canton	501,500	102,250	95	21	874,674	359,865	1,585,196	639,946
Cincinnati	15,273,482	6,691,790	1,693	1,235	16,252,970	12,521,445	33,160,609	21,467,200

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY—Continued

East North Central States—Continued

State and city	New residential buildings: Estimated cost		Families provided for in new dwellings		Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and repairs	
	1930	1931	1930	1931	1930	1931	1930	1931
Ohio—Continued.								
Cleveland	$6,202,300	$2,592,700	1,176	511	$21,037,067	$4,614,674	$32,554,467	$11,991,074
Columbus	3,188,400	1,678,700	575	300	1,413,650	1,156,750	5,616,100	3,369,450
Dayton	913,775	746,812	213	173	4,259,166	1,735,663	5,958,274	2,895,432
East Cleveland	712,200	5,000	56	1	85,689	730,937	843,404	761,906
Hamilton	361,950	90,900	81	23	937,064	283,163	1,552,153	467,472
Lakewood	1,039,800	469,800	248	88	369,398	273,670	1,481,992	797,424
Lima	51,300	9,200	11	3	867,947	12,380	1,017,506	100,294
Lorain	276,050	103,925	83	30	334,373	137,619	652,133	278,019
Mansfield	437,850	450,050	97	81	158,767	246,885	717,838	744,446
Marion	49,800	3,000	14	1	537,925	12,360	612,110	24,398
Newark	75,900	48,350	29	20	126,070	114,250	225,215	176,600
Portsmouth	158,650	3,800	31	2	168,496	411,023	373,942	451,459
Springfield	409,500	188,650	91	40	245,180	885,104	777,155	1,193,852
Steubenville	300,500	101,800	68	28	406,570	55,565	835,345	203,340
Toledo	1,454,435	612,500	372	135	6,367,638	1,086,314	10,404,771	2,294,985
Warren	310,245	123,675	93	30	171,845	101,835	678,340	334,835
Youngstown	729,405	362,750	163	84	1,678,782	459,054	2,801,434	1,463,711
Zanesville	99,750	50,125	39	20	97,414	274,928	213,039	345,095
Wisconsin:								
Fond du Lac	211,500	144,325	37	42	113,431	176,234	399,608	376,736
Green Bay	422,150	474,600	113	141	706,235	289,045	1,368,558	959,061
Kenosha	757,030	153,100	78	20	569,843	351,565	1,483,907	646,369
Madison	1,086,050	710,300	179	135	935,361	384,272	2,34[illegible]852	1,344,877
Milwaukee	6,961,332	4,319,900	1,729	929	11,880,438	5,388,843	25,285,322	12,634,264
Oshkosh	233,955	150,833	60	52	334,541	460,075	746,297	712,335
Racine	877,445	298,400	174	47	2,533,968	1,288,254	3,924,208	1,756,596
Sheboygan	486,500	369,900	98	76	574,019	433,561	1,407,165	1,111,104
Superior	165,450	76,400	47	23	680,460	130,135	969,101	262,146
Total, East North Central	123,125,354	51,068,272	20,480	10,234	190,442,123	129,912,385	361,209,653	214 775 539
Per cent of change		−58.5		−50.0		−31.8		−40.5

West North Central States

Iowa:								
Burlington	$91,230	$65,725	18	21	$543,935	$126,285	$813,875	$245,206
Cedar Rapids	345,700	470,005	91	139	1,210,337	844,957	2,032,213	1,606,422
Council Bluffs	111,000	119,500	32	41	465,250	207,100	769,550	439,800
Davenport	1,501,490	485,920	168	128	509,386	213,732	2,462,330	1,252,421
Des Moines	1,106,895	1,226,595	225	323	2,620,645	1,429,352	4,011,153	3,032,641
Dubuque	319,986	202,977	62	56	1,000,066	119,782	1,480,369	482,103
Ottumwa	214,800	243,400	48	61	219,100	187,375	527,460	607,675
Sioux City	2,015,500	782,950	179	222	1,075,000	516,605	3,411,875	1,571,425
Waterloo	485,025	446,975	137	111	578,950	214,543	1,191,385	783,593
Kansas:								
Hutchinson	392,485	166,125	105	62	1,321,789	114,823	1,894,011	326,539
Kansas City	521,800	262,000	187	127	714,645	331,811	1,350,053	667,172
Topeka	426,800	341,150	92	81	1,882,853	1,848,335	2,425,138	2,305,468
Wichita	2,855,140	997,780	736	304	2,953,415	1,102,834	6,307,617	2,340,208
Minnesota:								
Duluth	275,805	369,386	82	95	1,090,010	119,715	2,167,954	948,488
Minneapolis	5,126,205	4,941,625	1,355	1,265	5,668,910	5,978,305	13,449,340	12,389,585
St. Paul	2,830,632	2,078,910	402	397	6,232,388	9,135,567	10,682,039	12,651,781
Missouri:								
Joplin	146,700	69,800	36	28	492,318	382,303	843,939	529,483
Kansas City	4,025,500	1,572,500	864	423	9,740,041	4,920,150	15,663,491	8,290,500
Springfield	306,825	231,150	116	94	359,740	1,861,605	1,115,225	2,282,635
St. Joseph	246,550	108,500	96	49	1,166,861	203,235	1,619,511	431,303
St. Louis	5,710,520	5,512,337	1,618	1,491	8,336,667	9,096,518	17,321,832	16,619,809
Nebraska:								
Lincoln	552,450	642,925	98	114	902,692	930,896	1,597,734	1,744,736
Omaha	906,775	1,370,675	208	334	3,479,797	1,891,438	5,121,226	3,914,556
South Dakota:								
Sioux Falls	932,317	880,263	255	232	767,149	1,046,700	2,001,363	2,106,272
Total, West North Central	31,448,130	23,589,173	7,210	6,198	53,331,944	42,823,966	100,260,683	77,569,821
Per cent of change		−25.0		−14.0		−19.7		−22.6

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY—Continued

South Atlantic States

State and city	New residential buildings				Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and repairs	
	Estimated cost		Families provided for in new dwellings					
	1930	1931	1930	1931	1930	1931	1930	1931
Delaware:								
Wilmington	$1,861,070	$1,054,050	367	217	$2,347,741	$1,360,212	$4,917,012	$3,297,387
District of Columbia:								
Washington	14,987,000	20,626,489	1,962	3,606	28,151,738	26,421,864	48,823,891	52,588,151
Florida:								
Jacksonville	488,075	461,550	186	160	1,134,200	739,190	2,410,265	1,847,400
Miami	467,650	604,405	114	167	628,550	1,652,848	1,916,885	3,096,649
St. Petersburg	412,700	373,300	73	67	160,650	91,300	797,400	676,994
Tampa	151,730	140,975	91	65	819,575	270,865	1,302,088	740,820
Georgia:								
Atlanta	1,680,504	1,063,185	714	423	5,203,175	1,223,365	8,445,860	3,470,577
Augusta	336,010	148,789	124	77	170,094	430,767	715,330	732,406
Columbus	272,525	91,650	91	36	338,577	83,604	711,496	273,193
Macon	82,235	91,725	45	41	413,605	86,860	776,527	563,566
Savannah	343,150	232,600	94	94	623,890	46,607	1,068,610	450,271
Maryland:								
Baltimore	7,240,800	8,363,000	1,484	1,953	12,826,185	9,429,600	27,820,785	24,690,799
Cumberland	157,112	73,535	47	24	45,814	191,530	250,453	292,989
Hagerstown	233,000	121,250	43	33	298,064	73,415	572,018	245,550
North Carolina:								
Asheville	74,500	20,700	23	18	198,060	61,516	442,282	233,949
Charlotte	1,245,378	808,098	317	203	989,224	224,495	2,587,630	1,318,499
Durham	569,243	203,350	114	71	390,112	366,490	1,046,810	693,080
Greensboro	285,150	143,659	61	32	258,894	766,934	766,185	1,134,739
Wilmington	172,600	177,000	52	42	439,700	146,400	693,150	481,350
Winston-Salem	455,400	233,866	130	53	854,755	337,695	1,602,448	852,487
South Carolina:								
Charleston	161,068	159,363	56	49	784,525	124,893	1,102,690	414,295
Columbia	792,625	456,623	152	177	914,945	1,437,727	1,902,760	2,072,587
Greenville	269,160	333,600	72	72	537,576	78,900	1,055,275	492,348
Virginia:								
Lynchburg	630,847	410,308	114	101	816,152	260,652	1,635,523	876,570
Newport News	287,248	173,849	91	61	714,763	311,809	1,316,473	751,671
Norfolk	855,820	987,168	220	262	1,457,030	255,003	2,603,327	1,640,023
Petersburg	130,675	46,105	37	18	34,505	62,153	213,667	136,363
Portsmouth	176,800	139,945	71	45	216,820	38,718	542,035	334,826
Richmond	995,416	1,039,128	227	191	3,877,266	1,326,479	5,951,200	3,054,184
Roanoke	537,910	696,825	101	67	1,824,294	320,329	2,605,874	1,112,713
West Virginia:								
Charleston	803,283	396,074	217	109	5,822,841	319,064	6,880,506	1,050,398
Clarksburg	41,500	94,550	18	36	384,900	536,690	514,470	752,010
Huntington	553,300	87,900	56	30	161,722	953,564	769,622	1,095,839
Wheeling	219,650	187,330	45	44	507,412	302,480	1,120,604	644,664
Total, South Atlantic	37,971,134	40,241,944	7,609	8,644	74,347,354	50,334,018	135,881,151	112,109,347
Per cent of change		+6.0		+13.6		−32.3		−17.5

South Central States

Alabama:								
Birmingham	$381,036	$193,585	166	94	$1,342,847	$1,084,787	$2,419,983	$1,937,497
Mobile	361,775	216,650	191	102	446,841	474,538	1,100,220	881,377
Montgomery	563,200	517,900	280	240	358,592	115,795	1,274,072	819,750
Arkansas:								
Little Rock	1,041,910	349,355	283	84	534,376	2,191,206	2,251,437	2,770,775
Kentucky:								
Covington	272,500	137,200	67	39	171,050	444,060	628,900	761,071
Lexington	228,430	134,750	85	56	758,152	425,532	1,223,819	692,977
Louisville	2,329,900	1,007,800	428	156	3,761,060	3,830,655	6,937,105	5,585,415
Newport	67,800	12,200	17	3	108,300	60,800	213,865	116,300
Paducah	146,940	51,900	84	32	177,125	120,830	332,470	178,091
Louisiana:								
Baton Rouge	192,174	402,801	73	108	498,858	247,429	858,164	849,026
New Orleans	1,177,790	1,017,799	258	349	4,209,552	3,638,780	6,487,118	5,526,366
Shreveport	470,904	250,969	171	143	447,601	864,536	1,541,829	1,600,269
Oklahoma:								
Muskogee	52,600	116,200	24	18	467,894	41,575	567,554	172,600
Oklahoma City	8,618,825	4,225,975	2,005	879	16,702,356	14,256,206	26,412,100	19,018,975
Okmulgee	1,000	0	1	0	19,735	5,746	39,540	9,941
Tulsa	3,874,395	1,513,409	943	377	3,731,226	2,455,743	8,356,095	4,388,628

TABLE 3.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, TOTAL CONSTRUCTION, AND FAMILIES PROVIDED FOR, 1930 AND 1931, BY CITY—Continued

South Atlantic States—Continued

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new dwellings		Estimated cost of new nonresidential buildings		Estimated cost of total construction, including alterations and repairs	
	1930	1931	1930	1931	1930	1931	1930	1931
Tennessee:								
Chattanooga	$961,675	$360,065	223	123	$1,345,759	$342,988	$2,934,150	$1,229,970
Knoxville	784,167	250,460	238	90	2,654,138	665,648	3,626,768	1,034,567
Memphis	3,862,730	536,510	1,057	227	4,107,634	1,576,695	9,501,481	3,334,353
Nashville	1,002,000	838,625	358	279	3,848,305	3,112,815	5,517,037	4,403,401
Texas:								
Austin	1,132,081	1,077,519	493	573	1,836,681	1,077,351	3,335,227	2,471,381
Beaumont	722,611	201,148	267	91	1,044,986	548,916	2,606,131	1,020,921
Dallas	2,460,230	1,948,384	996	947	6,786,709	1,104,464	11,027,546	4,348,093
El Paso	1,481,502	579,395	470	184	1,072,468	152,661	2,937,105	948,570
Fort Worth	2,262,499	1,766,036	626	495	7,446,738	4,081,812	10,463,409	6,345,185
Galveston	420,365	366,864	127	145	1,026,915	1,918,058	1,717,460	2,542,849
Houston	9,702,815	7,828,551	2,227	1,793	7,072,791	3,707,959	17,264,993	11,863,071
Port Arthur	610,059	102,847	244	50	1,579,302	661,210	2,429,720	904,670
San Antonio	2,601,672	1,181,387	1,135	668	5,023,175	1,674,897	8,487,719	3,271,544
Waco	339,208	238,329	106	88	421,235	1,389,791	1,154,055	1,778,552
Wichita Falls	121,040	19,550	30	6	660,263	544,471	1,104,822	639,189
Total, South Central	48,245,833	27,444,163	13,673	8,439	79,662,664	52,817,9541	44,751,8949	1,445,374
Per cent of change		−43.1		−38.3		−33.7		−36.8

Mountain and Pacific States

Arizona:								
Phoenix	$1,023,215	$715,010	410	222	$1,954,673	$1,268,679	$3,275,852	$2,109,735
Tucson	761,768	560,938	191	186	958,361	549,593	2,033,994	1,481,381
California:								
Alameda	466,450	259,100	145	62	221,610	249,378	981,138	676,547
Berkeley	1,721,014	961,312	345	216	753,847	595,921	2,985,789	1,900,019
Fresno	395,050	531,220	107	132	452,871	124,587	1,332,714	1,007,396
Long Beach	5,663,305	2,629,400	1,993	995	6,599,920	1,280,135	13,058,035	4,471,600
Los Angeles	33,201,363	19,397,887	11,437	6,600	31,451,568	14,525,977	75,356,715	41,421,685
Oakland	4,165,034	2,798,373	1,231	777	3,515,231	3,420,050	9,085,238	7,223,345
Pasadena	2,163,861	1,279,059	214	195	2,611,916	2,165,334	5,886,328	4,459,865
Sacramento	1,459,483	1,553,105	388	313	1,018,835	1,722,894	3,028,756	3,787,394
San Diego	2,988,775	2,342,677	829	627	1,672,216	2,468,511	5,425,922	5,811,456
San Francisco	9,504,560	9,323,885	2,206	2,441	9,973,490	10,016,377	22,414,449	21,442,434
San Jose	1,101,965	773,810	185	200	1,933,980	662,585	3,402,840	1,803,418
Stockton	349,450	620,663	100	146	688,041	914,378	1,296,295	1,736,709
Vallejo	93,525	123,550	28	32	154,052	101,771	337,663	301,136
Colorado:								
Colorado Springs	259,575	98,675	56	43	485,207	145,697	926,322	387,963
Denver	2,535,450	3,637,300	613	994	3,385,450	2,115,421	7,648,450	6,827,976
Pueblo	135,800	80,950	61	45	185,588	239,458	538,222	453,716
Montana:								
Butte	28,073	450	67	1	336,831	297,256	396,048	320,328
Great Falls	395,785	375,750	103	93	718,450	506,670	1,284,892	983,905
Oregon:								
Portland	3,900,595	2,548,540	866	539	5,311,345	3,076,553	12,063,305	7,155,715
Utah:								
Ogden	260,875	100,900	113	47	611,578	68,820	1,009,578	250,890
Salt Lake City	1,885,300	1,316,738	554	442	1,974,970	1,743,717	4,274,493	3,461,620
Washington:								
Bellingham	269,550	114,800	108	43	353,510	140,160	743,325	358,840
Everett	178,600	46,200	71	19	366,330	26,150	830,365	168,121
Seattle	11,633,985	3,486,605	2,583	1,139	15,649,758	6,968,010	30,355,973	12,483,492
Spokane	1,226,500	784,050	328	216	1,751,359	971,885	3,640,843	2,176,405
Tacoma	1,045,000	463,500	347	185	2,552,785	1,189,120	4,069,518	2,002,015
Total, Mountain and Pacific	88,813,906	56,924,447	25,679	16,950	97,643,772	57,555,087	217,682,862	136,665,106
Per cent of change		−35.9		−34.0		−41.1		−37.2

Hawaii

Honolulu	$1,940,995	$2,218,734	827	864	$3,940,555	$1,170,479	$6,388,272	$3,736,739
Per cent of change		+14.3		+4.5		−70.3		−41.5

WAGES AND HOURS OF LABOR

Hours and Earnings in the Furniture Industry, 1931

SUMMARIES of average hours and earnings of wage earners in the furniture industry in the United States, as computed by the Bureau of Labor Statistics, United States Department of Labor, from wage figures collected by the bureau in a study of the industry in 1931, are presented in Table 1 of this report along with similar averages for a study in each of the years, 1910 to 1913, 1915, and 1929. Index numbers of each of the averages with the 1913 average as the base or 100 are also shown in the table. A later report as a bulletin of the bureau will furnish 1931 wage figures in more detail than can be given in this article.

Average full-time hours per week for the wage earners included in the study of the industry in 1931 were 51.8—one-tenth hour per week less than the average for 1929, and 5.6 hours per week less than the average for 1915. Average earnings per hour for 1931 were 41.1 cents, or 7.9 cents per hour less than the average for 1929 and 19.7 cents more per hour than the average for 1915. Average full-time earnings per week for 1931 were $21.29 or $4.14 less than the average for 1929 and $9.05 more per week than the average for 1915.

The averages for 1931, 1929, and 1915 for all occupations in the industry are comparable, one year with another, but are not comparable with the averages for wage earners in selected occupations for the years, 1910 to 1913 and 1915, because the latter include only a specified part of the occupations, while the former include all occupations in the industry.

The index numbers furnish comparable figures for the industry one specified year with another from 1910 to 1931. The index for each of the years from 1910 to 1915 for selected occupations is the per cent that the average for the year is of the average for 1913. The index for 1929 and also for 1931 for all occupations was computed by increasing or decreasing the 1915 index for selected occupations by the per cent that the average for all occupations for 1929 or for 1931 is more or less than the average for all occupations for 1915. Average full-time hours per week increased from an index of 101.4 in 1910 to 101.7 in 1911 and then decreased each year to 89.8 in 1931. The decrease between 1913 and 1931 was 10.2 per cent and between 1910 and 1931 was 11.4 per cent. Average earnings per hour decreased from an index of 98.6 in 1910 to 98.2 in 1911 and to 97.3 in 1912, increased each specified year to an index of 236.3 in 1929 when earnings per hour were 136.3 per cent more than in 1913. The 1931 index was 198.2 or 16.1 per cent less than the index for 1929. Average full-time earnings per week decreased from an index of 99.8 in 1910 to 99.4 in 1911 and to 98.6 in 1912, and increased each specified year to 212.8 in 1929 and then dropped to 178.1 in 1931. Earnings per week did not increase nor decrease in the same proportion as earnings per hour because of the change from year to year in average full-time hours.

The 1931 averages and index numbers are for a total of 30,659 wage earners of 299 representative furniture factories in 17 States. The factories included in the 1931 study are the same as those covered in 1929, except a few substituted for those closed since 1929. The same States were included in 1929 and 1931. Each State included is of material importance in number of wage earners in the industry according to reports of the Bureau of the Census.

The wage figures used in computing the 1931 averages in this report, except for a very few factories, were taken directly from the pay rolls and are for a representative pay period in July, August, September, or October, and consequently are representative of the hours and earnings of wage earners in the industry in those months.

TABLE 1.—AVERAGE HOURS AND EARNINGS IN THE FURNITURE INDUSTRY AND INDEX NUMBERS THEREOF, BY YEARS, 1910 TO 1931

Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers (1913=100) of—		
						Full-time hours per week	Earnings per hour	Full-time earnings per week
Selected occupations only:								
1910	128	9,398	58.2	$0.217	$12.56	101.4	98.6	99.8
1911	199	13,299	58.4	.216	12.50	101.7	98.2	99.4
1912	231	16,390	58.2	.214	12.41	101.4	97.3	98.6
1913	232	16,723	57.4	.220	12.58	100.0	100.0	100.0
1915	[1] 240	16,691	57.1	.227	12.88	99.5	103.2	102.4
All occupations:								
1915	[1] 240	25,576	57.4	.214	12.24			
1929	312	44,870	51.9	.490	25.43	89.9	236.3	212.8
1931	299	30,659	51.8	.411	21.29	89.8	198.2	178.1

[1] 2 sets of averages are shown for this year—1 for selected occupations and 1 for all occupations in the industry. The 1910 to 1915 averages for selected occupations are comparable 1 year with another, as are those for all occupations 1 year with another for 1915 to 1931.

Hours and Earnings, 1929 and 1931, by Occupation and Sex

TABLE 2 shows for 1929 and for 1931 average full-time hours per week, earnings per hour, and full-time earnings per week for each of the 19 specified occupations in the table, and also for the group of "other employees." The group includes all occupations other than those specified because no occupation in the group had a sufficient number of wage earners to warrant separate tabulation.

Averages are shown in the table for males in each of the 19 specified occupations and for females in all except 3—hand carvers, machine carvers, and gluers of rough stock. No females were reported as laborers in 1929. Average earnings per hour of males in each specified occupation and in the group of "other employees" were less in 1931 than in 1929. Their averages ranged in 1929 from 30.4 cents per hour for helpers to 95.6 cents per hour for hand carvers and in 1931 from 23.1 cents to 74.5 cents per hour, respectively, for the same occupations. Average earnings per hour of females in each occupation, except machine hands and veneerers, were less in 1931 than in 1929. Machine hands averaged 29.3 cents in 1929 and 31 cents in 1931 and veneerers 29 cents in 1929 and 29.6 cents in 1931. Average earnings per hour of females ranged by occupations in 1929 from 22.4 cents for helpers to 47.5 cents per hour for spring setters and in 1931 from 19.5 to 40.5 cents per hour, respectively, for the same occupations.

TABLE 2.—AVERAGE HOURS AND EARNINGS IN THE FURNITURE INDUSTRY, 1929 AND 1931, BY OCCUPATION AND SEX

Occupation	Sex	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time earnings per week	
		1929	1931	1929	1931	1929	1931	1929	1931	1929	1931
Assemblers and cabinet-makers.	Male	302	289	5,735	4,207	52.1	51.9	$0.560	$0.445	$29.18	$23.10
	Female	13	16	54	52	50.7	49.7	.317	.283	16.07	14.07
Carvers, hand	Male	91	75	295	161	48.6	49.7	.956	.745	46.46	37.03
Carvers, machine	do	138	140	394	342	51.1	51.7	.765	.576	39.09	29.78
Craters and packers	do	288	249	1,931	1,242	52.8	52.4	.435	.365	22.97	19.13
	Female	34	29	132	95	50.3	50.6	.331	.252	16.65	12.75
Cushion and pad makers	Male	68	58	184	126	50.0	49.8	.571	.514	28.55	25.60
	Female	17	20	57	47	50.6	49.1	.353	.334	17.86	16.40
Cutters upholstering materials.	Male	72	67	253	178	50.0	50.3	.647	.566	32.35	28.47
	Female	42	30	135	111	50.1	49.6	.409	.383	20.49	19.00
Finishers	Male	297	269	3,164	2,191	52.0	51.6	.505	.414	26.26	21.36
	Female	59	32	251	90	50.5	50.2	.371	.319	18.74	16.01
Gluers, rough stock	Male	206	178	583	364	52.5	52.3	.460	.379	24.15	19.82
Helpers	do	288	236	3,658	2,322	52.4	52.6	.304	.231	15.93	12.15
	Female	30	16	153	72	52.0	51.2	.224	.195	11.65	9.98
Laborers	Male	281	224	2,693	1,505	52.2	52.2	.378	.317	19.73	16.55
	Female	------	3	------	5	------	53.2	------	.250	------	13.30
Machine hands	Male	296	284	8,567	6,355	52.4	52.1	.512	.428	26.83	22.30
	Female	13	8	30	16	51.1	52.4	.293	.310	14.97	16.24
Polishers and rubbers	Male	247	207	1,897	1,194	52.7	52.8	.507	.403	26.72	21.28
	Female	14	11	33	31	52.5	50.9	.300	.259	15.75	13.18
Sanders, hand	Male	249	199	2,283	1,189	52.5	52.8	.419	.331	22.00	17.48
	Female	61	45	653	301	51.6	50.1	.268	.226	13.83	11.32
Sewers	Male	19	16	40	27	49.3	50.5	.670	.578	33.03	29.19
	Female	100	91	932	681	49.4	49.0	.408	.374	20.16	18.33
Sprayers	Male	270	235	1,155	813	52.8	52.4	.527	.445	27.83	23.32
	Female	10	10	22	16	52.0	48.2	.386	.324	20.07	15.62
Spring setters	Male	71	67	557	396	50.0	50.2	.507	.444	25.35	22.29
	Female	5	5	57	42	49.7	50.1	.475	.405	23.61	20.29
Trimmers	Male	215	176	991	610	52.2	51.9	.506	.432	26.41	22.42
	Female	18	7	89	19	50.9	52.1	.314	.205	15.98	10.68
Upholsterers	Male	151	139	2,523	2,119	50.1	50.3	.724	.538	36.27	27.06
	Female	13	16	49	71	50.3	52.2	.403	.296	20.27	15.45
Veneerers	Male	145	135	1,165	729	52.5	52.5	.454	.376	23.84	19.74
	Female	22	18	107	41	51.5	50.4	.290	.296	14.94	14.92
Other employees	Male	292	281	3,844	2,806	51.6	51.5	.516	.489	26.63	25.18
	Female	53	32	204	93	50.3	50.0	.343	.301	17.25	15.05

Hours and Earnings, 1929 and 1931, by Sex and State

TABLE 3 shows average full-time hours per week, earnings per hour, and full-time earnings per week for the wage earners included in the studies of the industry in 1929 and 1931. The averages are for males and females separately in each State and in all States combined, and also for both sexes together in each State and in all States combined.

Average full-time hours per week of males ranged by States in 1929 from a low of 47 to a high of 56.9, and in 1931 from 47.4 to 55; those of females ranged in 1929 from 45.4 to 55 and in 1931 from 44.8 to 55; and those of both sexes combined or the industry ranged in 1929 from 46.9 to 57, and in 1931 ranged from 47.2 to 55. The average for all males in all the States was 52.1 in 1929 and 51.9 in 1931, and for females was 50.5 in 1929 and 49.8 in 1931.

Average earnings per hour of males ranged by States in 1929 from 29 to 64.6 cents and 1931 from 23.6 to 59.4 cents; those of females ranged in 1929 from 14.5 to 49.2 cents and in 1931 from 14.1 to 47 cents. The average for males in all States was 49.9 cents in 1929 and 41.6 cents in 1931, and for females in all States was 34.5 cents in 1929 and 31.4 cents in 1931. The 1931 average for males in each State and for females, except in two States, was less than the 1929 average. The 1931 average for males in all States was 16.6 per cent less than the 1929 average and for females was 9 per cent less than the 1929 average.

TABLE 3.—AVERAGE HOURS AND EARNINGS IN THE FURNITURE INDUSTRY, 1929 AND 1931, BY SEX AND STATE

Sex and State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time earnings per week	
	1929	1931	1929	1931	1929	1931	1929	1931	1929	1931
Males										
California	15	15	1,606	1,264	47.0	47.4	$0.599	$0.525	$28.15	$24.89
Georgia	5	5	643	722	55.1	55.0	.290	.244	15.98	13.42
Illinois	30	30	4,947	3,297	50.0	50.1	.608	.498	30.40	24.95
Indiana	39	31	4,701	3,125	52.6	51.6	.443	.399	23.30	20.59
Kentucky	4	5	708	516	56.9	54.3	.453	.389	25.78	21.12
Maryland	12	11	763	498	51.1	49.5	.516	.482	26.37	23.86
Massachusetts	18	16	1,904	1,151	48.3	48.6	.646	.594	31.20	28.87
Michigan	23	23	5,158	2,856	51.2	51.0	.555	.461	28.42	23.51
Missouri	13	13	642	476	51.9	50.8	.477	.432	24.76	21.95
New Jersey	6	5	509	511	49.0	49.0	.619	.589	30.33	28.86
New York	55	55	6,526	3,917	51.4	51.3	.566	.475	29.09	24.37
North Carolina	17	17	3,951	3,206	55.0	54.2	.333	.288	18.32	15.61
Ohio	24	23	2,266	1,381	53.6	53.8	.493	.435	26.42	23.40
Pennsylvania	26	25	2,978	2,026	53.2	53.3	.474	.418	25.22	22.28
Tennessee	4	4	716	423	54.4	52.7	.348	.289	18.93	15.23
Virginia	8	8	1,351	1,605	55.0	55.0	.298	.236	16.39	12.98
Wisconsin	13	13	2,543	1,902	53.7	53.6	.459	.430	24.65	23.05
Total	312	299	41,912	28,876	52.1	51.9	.499	.416	26.00	21.59
Females										
California	10	11	132	99	45.4	44.8	.492	.470	22.34	21.06
Georgia	1	3	(1)	65	(1)	55.0	(1)	.208	(1)	11.44
Illinois	12	8	462	319	50.0	50.1	.427	.375	21.35	18.79
Indiana	21	16	255	121	52.9	51.1	.272	.233	14.39	11.91
Kentucky	1	4	(1)	24	(1)	52.9	(1)	.232	(1)	12.27
Maryland	9	8	71	47	50.0	49.0	.387	.350	19.35	17.15
Massachusetts	15	14	201	115	47.7	46.4	.356	.436	16.98	20.23
Michigan	17	17	563	256	51.4	51.8	.340	.295	17.48	15.28
Missouri	8	8	49	25	50.0	49.8	.319	.277	15.95	13.79
New Jersey	3	3	11	28	46.2	45.5	.404	.434	18.66	19.75
New York	32	28	326	187	48.8	48.6	.389	.336	18.98	16.33
North Carolina	5	5	54	52	55.0	49.4	.189	.176	10.40	8.69
Ohio	14	13	184	121	49.8	49.7	.374	.314	18.63	15.61
Pennsylvania	16	9	101	58	50.8	50.6	.363	.241	18.44	12.19
Tennessee	3	2	165	89	55.0	50.7	.161	.141	8.86	7.15
Virginia	2		26		55.0		.145		7.98	
Wisconsin	11	13	333	177	50.0	50.0	.315	.297	15.75	14.85
Total	180	162	2,958	1,783	50.5	49.8	.345	.314	17.42	15.64
Males and females										
California	15	15	1,738	1,363	46.9	47.2	.591	.521	27.72	24.59
Georgia	5	5	663	787	55.1	55.0	.289	.241	15.92	13.26
Illinois	30	30	5,409	3,616	50.0	50.1	.593	.488	29.65	24.45
Indiana	39	31	4,956	3,246	52.6	51.5	.434	.394	22.83	20.29
Kentucky	4	5	713	540	57.0	54.2	.453	.383	25.82	20.76
Maryland	12	11	834	545	51.0	49.5	.505	.471	25.76	23.31
Massachusetts	18	16	2,105	1,266	48.2	48.4	.620	.581	29.88	28.12
Michigan	23	23	5,721	3,112	51.2	51.0	.535	.449	27.39	22.90
Missouri	13	13	691	501	51.8	50.8	.467	.425	24.19	21.59
New Jersey	6	5	520	539	48.9	48.8	.615	.580	30.07	28.30
New York	55	55	6,852	4,104	51.2	51.2	.558	.469	28.57	24.01
North Carolina	17	17	4,005	3,258	55.0	54.1	.331	.286	18.21	15.47
Ohio	24	23	2,450	1,502	53.3	53.5	.485	.425	25.85	22.74
Pennsylvania	26	25	3,079	2,084	53.1	53.2	.471	.413	25.01	21.97
Tennessee	4	4	881	512	54.5	52.3	.313	.266	17.06	13.91
Virginia	8	8	1,377	1,605	55.0	55.0	.296	.236	16.28	12.98
Wisconsin	13	13	2,876	2,079	53.3	53.3	.445	.420	23.72	22.39
Total	312	299	44,870	30,659	51.9	51.8	.490	.411	25.43	21.29

[1] Data included in total.

Hours and Earnings, 1931, by Occupation and State

TABLE 4 presents 1931 average full-time hours per week, earnings per hour and full-time earnings per week for males in each of six occupations in the industry. The number of wage earners in these occupations is 54.7 per cent of the total number of males that were included in the study and 51.5 per cent of males and females in all occupations. Averages are not shown in the table for females in any occupation because the number of wage earners of this sex is less than 6 per cent of the total of both sexes.

TABLE 4.—AVERAGE HOURS AND EARNINGS FOR SIX SPECIFIED OCCUPATIONS IN THE FURNITURE INDUSTRY, 1931, BY SEX AND STATE

State	Assemblers and cabinetmakers, male					Machine hands, male				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
California	15	160	46.9	$0.559	$26.22	15	239	48.5	$0.546	$26.48
Georgia	5	71	55.0	.257	14.14	5	158	55.0	.264	14.52
Illinois	30	510	50.0	.528	26.40	29	673	50.2	.524	26.30
Indiana	29	505	51.7	.429	22.18	30	651	51.6	.408	21.05
Kentucky	5	97	53.8	.411	22.11	5	93	54.1	.415	22.45
Maryland	10	56	49.8	.500	24.90	9	77	50.1	.479	24.00
Massachusetts	13	191	48.4	.660	31.94	14	243	48.9	.564	27.58
Michigan	23	409	51.1	.455	23.25	23	648	51.2	.474	24.27
Missouri	13	82	51.2	.465	23.81	11	116	50.6	.433	21.91
New Jersey	5	89	49.1	.618	30.34	5	128	49.1	.601	29.51
New York	54	568	52.0	.492	25.58	52	903	50.9	.479	24.38
North Carolina	17	391	54.0	.334	18.04	17	718	54.2	.316	17.13
Ohio	21	212	53.9	.435	23.45	21	337	54.6	.446	24.35
Pennsylvania	24	332	53.4	.422	22.53	23	479	53.4	.417	22.27
Tennessee	4	51	52.5	.278	14.60	4	96	52.4	.328	17.19
Virginia	8	186	55.0	.275	15.13	8	336	55.0	.269	14.80
Wisconsin	13	297	53.6	.425	22.78	13	460	53.8	.430	23.13
Total	289	4,207	51.9	.445	23.10	284	6,355	52.1	.428	22.30

State	Polishers and rubbers, male					Sanders, hand, male				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
California	6	31	47.4	$0.511	$24.22	11	62	47.3	$0.430	$20.34
Georgia	4	12	55.0	.196	10.78	5	46	55.0	.152	8.36
Illinois	22	106	50.3	.468	23.54	21	74	50.3	.452	22.74
Indiana	22	83	52.5	.367	19.27	22	154	52.1	.308	16.05
Kentucky	4	32	54.5	.405	22.07	3	24	55.0	.341	18.76
Maryland	2	6	51.7	.493	25.49	4	12	52.0	.366	19.03
Massachusetts	12	42	48.7	.550	26.79	8	32	49.8	.481	23.95
Michigan	23	156	50.6	.463	23.43	19	89	51.0	.370	18.87
Missouri	6	11	53.1	.386	20.50	5	8	52.2	.430	22.45
New York	40	201	52.7	.496	26.14	36	187	52.1	.392	20.42
North Carolina	14	174	55.0	.305	16.78	14	175	55.0	.268	14.74
Ohio	10	39	54.5	.462	25.18	13	64	54.5	.386	21.04
Pennsylvania	23	111	53.6	.423	22.67	19	100	53.7	.349	18.74
Tennessee	3	17	54.4	.253	13.76	4	19	53.3	.227	12.10
Virginia	8	113	55.0	.229	12.60	8	107	55.0	.218	11.99
Wisconsin	8	60	54.3	.466	25.30	7	36	54.2	.385	20.87
Total	207	1,194	52.8	.403	21.28	199	1,189	52.8	.331	17.48

State	Upholsterers, male					Veneerers, male				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
California	10	214	46.4	$0.576	$26.73	2	8	48.0	$0.430	$20.64
Georgia	4	95	55.0	.405	22.28					
Illinois	19	501	50.4	.470	23.69	19	85	50.0	.436	21.80
Indiana	10	131	51.3	.410	21.03	16	90	52.0	.331	17.21
Kentucky	1	15	55.0	.424	23.32	3	23	53.7	.386	20.73
Maryland	8	153	48.9	.601	29.39	1	1	(1)	(1)	(1)
Massachusetts	11	156	49.2	.721	35.47	3	4	46.0	.928	42.69
Michigan	9	79	50.5	.625	31.56	16	131	50.6	.470	23.78
Missouri	4	17	48.1	.720	34.63	2	5	52.8	.398	21.01
New Jersey	4	32	48.2	.793	38.22	1	1	(1)	(1)	(1)
New York	22	307	49.0	.651	31.90	23	102	52.4	.428	22.43
North Carolina	8	107	53.9	.363	19.57	10	70	55.0	.291	16.01
Ohio	10	150	51.8	.536	27.76	8	21	54.3	.403	21.88
Pennsylvania	9	52	52.0	.548	28.50	17	88	53.5	.363	19.42
Tennessee	2	14	50.4	.407	20.51	2	2	52.5	.350	18.38
Virginia	2	3	55.0	.409	22.50	7	72	55.0	.230	12.65
Wisconsin	6	93	52.4	.474	24.84	5	26	55.0	.390	21.45
Total	139	2,119	50.3	.538	27.06	135	729	52.5	.376	19.74

[1] For less than 3 wage earners in this establishment, data included in total.

Farm Wage and Labor Situation in January, 1932

THE general level of farm wages on January 1, 1932, was 13 per cent lower than in October, 1931, and 2 per cent below the 1910–1914 average, according to data compiled by the United States Department of Agriculture. The decline in the wage index was accompanied by a further increase in the supply of farm labor and a decline in demand. The supply on January 1 was 120.9 per cent of normal and the demand 60.5 per cent of normal; the corresponding figures for October, 1931, were 113.4 and 68.9, respectively. Supply expressed as per cent of demand on January 1 was 199.8, which is the highest ratio recorded by the Department of Agriculture since the beginning of its record in 1918. Reports received by that department, particularly from the North Central States, cite numerous instances of farm laborers working for board and lodging alone.

Table 1 shows farm wage rates and index numbers for the years 1928, 1929, and 1930, and for the months of January, April, July, and October, 1929 to 1931, and for January, 1932, as reported by the Department of Agriculture.

TABLE 1.—FARM WAGE RATES AND INDEX NUMBERS, 1928 TO JANUARY, 1932

Year and month	Average farm wage				Index numbers of farm wages (1910–1914=100)
	Per month		Per day		
	With board	Without board	With board	Without board	
1928	$34.66	$48.65	$1.88	$2.43	169
1929	34.74	49.08	1.88	2.42	170
1930	31.14	44.59	1.65	2.16	152
1929—January	33.04	47.24	1.78	2.34	162
April	34.68	49.00	1.79	2.34	167
July	36.08	50.53	1.89	2.43	173
October	35.90	50.00	1.92	2.46	174
1930—January	32.29	46.80	1.73	2.27	159
April	33.83	47.81	1.72	2.27	162
July	33.47	47.24	1.72	2.23	160
October	31.23	44.28	1.61	2.12	150
1931—January	26.03	39.04	1.38	1.87	129
April	25.99	38.37	1.33	1.80	127
July	25.35	37.00	1.29	1.73	123
October	23.31	34.22	1.18	1.59	113
1932—January	19.77	30.53	1.02	1.40	98

Table 2, compiled from figures given in a press release of the Department of Agriculture, dated January 18, 1932, shows farm wage rates and farm labor supply and demand in the several geographic divisions, and in the United States as a whole, on January 1, 1932.

TABLE 2.—FARM WAGE RATES AND FARM LABOR SUPPLY AND DEMAND, JANUARY 1, 1932, BY GEOGRAPHIC DIVISION, AND FOR THE COUNTRY AS A WHOLE

Geographic division	Wage rates				Farm labor supply and demand		
	Per month		Per day		Supply, per cent of normal	Demand, per cent of normal	Supply, per cent of demand
	With board	Without board	With board	Without board			
North Atlantic	$29.13	$48.80	$1.70	$2.37	121.0	70.0	172.9
East North Central	21.97	33.80	1.17	1.63	128.5	61.1	210.2
West North Central	20.98	31.65	1.12	1.55	123.1	56.7	217.0
South Atlantic	14.43	21.80	.74	1.02	114.2	63.5	179.8
South Central	14.76	21.90	.72	.96	118.0	56.9	207.5
Western	32.39	51.45	1.48	2.12	129.2	61.9	208.7
United States	19.77	30.53	1.02	1.40	120.9	60.5	199.8

Wage-Rate Changes in Manufacturing Industries in January, 1932

OF THE 16,197 manufacturing establishments from which data concerning employment were received, 15,321, or 94.6 per cent of the total number of establishments, reported no wage-rate changes during the month ending January 15, 1932. A total of 860 establishments, or 5.3 per cent of the total number, reported decreases in wage rates averaging 10.9 per cent and affecting 94,780 employees, or 3.5 per cent of all the employees. Wage-rate increases averaging 2.1 per cent were reported by 16 establishments in one industry—printing, book and job—and 1,157 employees were affected.

WAGE CHANGES OCCURRING BETWEEN DECEMBER 15, 1931, AND JANUARY 15, 1932

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
All manufacturing industries	16,197	2,716,535	15,321	16	860	2,620,598	1,157	94,780
Per cent of total	*100.0*	*100.0*	*94.6*		*5.3*	*96.5*		*3.5*
Slaughtering and meat packing	204	86,859	191		13	85,761		1,098
Confectionery	323	31,858	297		26	29,208		2,650
Ice cream	302	10,472	294		8	10,306		166
Flour	392	15,257	354		38	13,880		1,377
Baking	834	59,918	805		29	58,543		1,375
Sugar refining, cane	14	7,854	14			7,854		
Beet sugar	46	4,045	44		2	3,952		93
Beverages	281	9,708	275		6	9,666		42
Butter	200	4,997	181		19	4,462		535
Cotton goods	533	180,458	486		47	170,582		9,876
Hosiery and knit goods	376	86,402	361		15	85,155		1,247
Silk goods	265	49,494	245		20	46,999		2,495
Woolen and worsted goods	180	46,252	166		14	43,166		3,086
Carpets and rugs	33	15,418	30		3	15,233		185
Dyeing and finishing textiles	144	36,950	136		8	35,673		1,277
Clothing, men's	342	54,588	318		30	51,499		3,089
Shirts and collars	106	14,067	98		8	13,526		541
Clothing, women's	396	25,080	392		4	24,700		380
Millinery and lace goods	133	10,280	129		4	10,125		155
Corsets and allied garments	30	5,127	30			5,127		
Cotton small wares	103	9,680	95		8	9,418		262
Hats, fur-felt	39	5,708	38		1	5,669		39
Men's furnishings	70	4,732	66		4	4,438		294
Iron and steel	203	193,807	198		5	191,256		2,551
Cast-iron pipe	41	8,698	36		5	7,256		1,442
Structural-iron work	168	19,143	160		8	18,556		587
Hardware	91	23,149	85		6	21,854		1,295
Steam fittings	105	19,810	91		14	15,459		4,351
Stoves	130	12,302	114		16	10,727		1,575
Bolts, nuts, washers, and rivets	62	7,532	56		6	6,791		741
Cutlery and edge tools	156	13,769	152		4	13,555		214
Forgings, iron and steel	49	5,094	48		1	4,744		350
Plumbers' supplies	63	4,795	60		3	4,678		117
Tin cans and other tinware	54	7,385	53		1	7,283		102
Tools, not including edge tools	119	7,494	110		9	6,775		719
Wirework	61	5,036	58		3	4,757		279
Lumber, sawmills	597	60,610	571		26	56,973		3,637
Lumber, millwork	348	19,938	318		30	18,457		1,481
Furniture	432	45,580	393		39	42,341		3,239
Turpentine and rosin	19	903	17		2	872		31
Leather	137	21,800	132		5	21,281		519
Boots and shoes	285	95,945	268		17	94,464		1,481
Paper and pulp	391	75,787	359		32	71,267		4,520
Paper boxes	294	21,205	280		14	20,141		1,064
Printing, book and job	611	52,556	577	16	18	51,036	1,157	363
Printing, newspapers and periodicals	402	63,320	391		11	62,070		1,250
Chemicals	110	20,747	108		2	20,266		481
Fertilizers	201	7,196	187		14	6,823		373
Petroleum refining	100	46,728	98		2	46,540		188
Cottonseed oil, cake, and meal	42	1,772	42			1,772		
Druggists' preparations	22	5,314	21		1	5,289		25
Explosives	20	3,229	20			3,229		
Paints and varnishes	324	14,146	307		17	13,400		746
Rayon	19	24,105	19			24,105		
Soap	62	8,957	58		4	8,640		317

WAGE CHANGES OCCURRING BETWEEN DECEMBER 15, 1931, AND JANUARY 15, 1932—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Cement	113	13,620	100	----	13	12,798	----	822
Brick, tile, and terra cotta	689	18,957	670	----	19	17,716	----	1,241
Pottery	106	13,679	100	----	6	13,009	----	670
Glass	188	35,026	178	----	10	34,179	----	847
Marble, granite, slate, etc	212	5,242	203	----	9	4,803	----	439
Stamped and enameled ware	86	13,239	80	----	6	12,153	----	1,086
Brass, bronze, and copper products	166	27,214	160	----	6	26,516	----	698
Aluminum manufactures	24	5,493	24	----	----	5,493	----	----
Clocks, clock movements, etc	18	4,073	18	----	----	4,073	----	----
Gas and electric fixtures	44	5,134	42	----	2	4,971	----	163
Plated ware	37	5,019	36	----	1	4,974	----	45
Smelting and refining, copper, lead, and zinc	26	8,938	26	----	----	8,938	----	----
Jewelry	146	8,229	143	----	3	7,624	----	605
Chewing and smoking tobacco, snuff	29	9,477	29	----	----	9,477	----	----
Cigars and cigarettes	188	42,748	181	----	7	42,190	----	558
Automobiles	228	242,536	220	----	8	240,783	----	1,753
Aircraft	35	6,945	33	----	2	6,471	----	474
Cars, electric and steam railroad	30	3,917	26	----	4	2,297	----	1,620
Locomotives	15	3,568	14	----	1	3,117	----	451
Shipbuilding	95	33,216	93	----	2	33,140	----	76
Rubber tires and inner tubes	37	44,039	34	----	3	40,314	----	3,725
Rubber boots and shoes	8	9,877	8	----	----	9,877	----	----
Rubber goods, other	95	18,535	91	----	4	17,723	----	812
Agricultural implements	70	8,948	65	----	5	8,775	----	173
Electrical machinery, apparatus and supplies	239	138,889	232	----	7	137,937	----	952
Engines and water wheels	71	13,707	68	----	3	13,580	----	127
Cash registers and calculating machines	44	15,948	44	----	----	15,948	----	----
Foundry and machine-shop products	959	116,942	902	----	57	110,055	----	6,887
Machine tools	139	15,255	132	----	7	14,648	----	607
Textile machinery and parts	34	7,465	31	----	3	7,280	----	185
Typewriters and supplies	17	11,256	16	----	1	11,247	----	9
Radio	37	17,570	36	----	1	17,557	----	13
Electric railroad	429	23,986	416	----	13	23,566	----	420
Steam railroad	473	74,792	438	----	35	69,770	----	5,022

Recent Wage Changes Reported by Trade-Unions

WAGE and hour changes reported by unions and municipalities during the past month cover 44,345 workers, 605 of whom were reported to have gone on the 5-day week. A tabulation of these changes is shown in the table following.

In addition to those reporting changes, bakers, Syracuse, N. Y.; brewery workers, Buffalo, N. Y.; clothing workers, Cincinnati, Ohio; awning workers, St. Louis, Mo.; musicians, Kansas City, Mo.; news compositors, Dallas, Tex.; stereotypers and electrotypers, Houston, Tex.; and electrotypers in New York City, reported renewed wage agreements.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER, 1931, TO FEBRUARY, 1932

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Bakers, Chicago, Ill.:		*Per week*	*Per week*		
First bakers	Jan. 1	$48.00	$43.00	48	40
Second bakers	do	42.00	37.00	48	40
Building trades:					
Bricklayers—		*Per hour*	*Per hour*		
Bakersfield, Calif.,[1] and vicinity	do	1.50	1.37½	40	40
Hannibal, Mo., and vicinity	Nov. 1	1.50	1.25	44	44
Lincoln, Nebr	Jan. 1	1.25	1.00	44	44
Carpenters—					
Bakersfield, Calif., and vicinity	do	1.12½	1.00	40	40
Brockton, Mass., and vicinity	Jan. 4	1.25	1.15	40	40
Cleveland, Ohio, and vicinity	Jan. 1	1.37½	1.12½	40	40
Danielson, Conn	Feb. 1	.87½	.78	40	40
Dayton, Ohio	Dec. 21	1.25	[1] 1.00	40	40
Duluth, Minn	Jan. 1	1.00	1.00	44	40
Franklin, Pa	Jan. 15	1.12½	.95	40	40
North Adams, Mass., and vicinity	Jan. 11	1.06¼	1.00	40	40
Portland, Me	Nov. 13	1.00	.80	44	44
Stockton, Calif	Dec. 15	1.12½	1.00	44	44
Syracuse, N. Y	Jan. 1	1.32	1.00	40	40
Watsonville, Calif	Jan. 5	1.12½	1.00	40	40
Cement finishers, Waco, Tex., and vicinity	Nov. 15	1.25	1.00	40	40
Electrical workers—					
Bakersfield, Calif., and vicinity	Jan. 1	1.25	1.12½	40	40
Richmond, Va	Dec. 1	.87½	.80	44–48	40
Laborers, Stockton, Calif	Jan. 11	.62½	.50	44	44
Lathers, Bakersfield, Calif., and vicinity	Jan. 1	1.25	1.12½	40	40
Painters, decorators, and paper hangers—					
Bakersfield, Calif., and vicinity	do	1.12½	1.00	40	40
Dallas, Tex., sign, scene, and pictorial painters	Jan. 11	1.50	1.25	44	44
Franklin, Pa	Jan. 13	1.00	.87½	44	40
Moberly, Mo	Jan. 1	.87½	.75	48	48
Plasterers—					
Bakersfield, Calif., and vicinity	do	1.50	1.37½	40	40
Pasadena, Calif	Nov. 6	1.50	1.12½	40	40
Waco, Tex., and vicinity	Nov. 15	1.75	1.50	40	40
Plumbers and steamfitters—					
Bakersfield, Calif., and vicinity	Jan. 1	1.37½	1.25	40	40
Haverhill, Mass	Dec. 23	1.21	1.01	40	40
Spokane, Wash	Jan. 1	1.25	1.00	40	40
Utica, N. Y	Nov. 24	1.37½	1.25	40	40
Sheet-metal workers, Bakersfield, Calif., and vicinity	Jan. 1	1.25	1.12½	40	40
		Per week	*Per week*		
Chauffeurs and teamsters, Chicago, Ill	Jan. 2	31.00–44.00	28.50–44.50	60	60
Clothing:					
Neckwear workers, New York, N. Y	Jan. 18	[2]	[2]	44	44
Shoe cutters, Brockton, Mass	Jan. 12	40.80	37.00	48	48
Paper makers:		*Per hour*	*Per hour*		
Holyoke, Mass	Dec. 28	.39– .92	[4] .05– .07	48	48
Monroe, Mich	Jan. 1	.41– .81	.35– .73	[5]	[5]
Printing and publishing:					
Compositors—					
Chattanooga, Tenn.—		*Per week*	*Per week*		
Newspaper, day	Nov. 1	44.50	42.00	45	45
Newspaper, night	do	47.50	45.00	45	45
Long Beach, Calif	Dec. 2	[3]	[3]	45	41¼
Tulsa, Okla.—					
Newspaper, day	Feb. 1	49.00	50.00	48	48
Newspaper, night	do	52.00	53.00	48	48
Woonsocket, R. I.—					
Job work	Nov. 28	43.00	44.00	44	44
Newspaper	do	43.00	44.00	48	48
		Per day	*Per day*		
Pressmen, Portland, Oreg.—					
Newspaper, day	Nov. 1	7.50	7.50	48	40
Newspaper, night	do	7.75	7.75	45	37½
Stereotypers—					
Rochester, N. Y.—		*Per week*	*Per week*		
Newspaper, day	do	51.00	50.00	48	48
Newspaper, night	do	55.00	54.00	48	48
		Per day	*Per day*		
Tacoma, Wash.—					
Day work	Jan. 3	8.00	7.25	42	42
Night work	do	8.50	7.75	42	42

[1] Temporary.
[2] Piecework.
[3] 10 per cent reduction.
[4] Amount of reduction.
[5] Not reported.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, NOVEMBER, 1931, TO FEBRUARY, 1932—Continued

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Stationary steam engineers, Holyoke, Mass., and vicinity:		*Per week*	*Per week*		
1st class	Jan. 1	$53.00	$50.00	48	48
		Per hour	*Per hour*		
2d class	do	.93	.87	48	48
3d class	do	.85	.79	48	48
Steam boiler operatives, Holyoke, Mass., and vicinity	Dec. 27	.73	.68	48	48
Street railway workers:					
Dayton, Ohio	Jan. 1	.55	.50	[6] 60	[6] 60
East St. Louis, Ill., conductors, motormen, and shopmen	do	.44–.62	[3]	30–63	30–63
Mobile, Ala.—					
Conductors and motormen	do	.49–.53	.45–.49	60	60
Machinists	do	.67	.64	45	45
Northampton, Mass., car operators and bus drivers	Feb. 1	.63	.55	54	54
Textiles:		*Per week*	*Per week*		
Sheeting workers, Peabody and Salem, Mass.	Jan. 18	[6] 22.20	[6] 20.00	35	35
Municipal:					
Detroit, Mich	Jan. 1	[5]	[7]	[5]	[5]
Philadelphia, Pa., city and county employees receiving over $1,200 a year	do	[5]	[3]	[5]	[5]
Syracuse, N. Y., employees receiving over $1,200 a year	do	[5]	[3]	[5]	[5]
Union County, N. J., park commission employees receiving 50 cents an hour and over	Feb. 1	[5]	[3]	44	44

[3] 10 per cent reduction.
[5] Not reported.
[6] Average.
[7] 10 to 17 per cent reduction.
[8] Various.

Wages of Seamen, 1931

THE following data on wages of seamen on American and foreign vessels are from Merchant Marine Statistics, 1931, compiled by the Bureau of Navigation of the United States Department of Commerce.

All wages, except American, are taken from consular reports. The American figures are averages taken from reports of the shipping commissioners. The wages on foreign vessels are stated in the United States equivalents of the foreign values, taken at the exchange rate on January 1 of the year named. When more than one rate has been reported for foreign vessels, due to length of service or other conditions, the highest is usually given in the table. On Dutch tank steamers the wages in the deck department are about 10 per cent more than those stated herein. The wages on American motor ships average about 10 per cent more than on steamships. On German motor ships the engineers receive $5 per month more and the other personnel in the engineer department $3 more than on steamships.

Table 1 gives average monthly wage rates, on January 1, 1931, of four typical classes of seamen on vessels of American and foreign registry.

TABLE 1.—AVERAGE MONTHLY WAGES OF FOUR TYPICAL CLASSES OF SEAMEN ON AMERICAN AND FOREIGN STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER, JANUARY 1, 1931

Nationality of vessels	Able seamen	Carpenters	Chief engineers	Firemen
American:				
Private	[1] $60	$77	$280	$63
United States Shipping Board	63	79	277	66
British	43	63	[1] 147	46
Danish	42	48	168	43
Dutch	40	46	146	42
French	23	24	152	26
German	31	38	138	37
Italian	26	32	82	33
Norwegian	43	----------	141	44
Spanish	19	22	74	19
Swedish	42	44	145	42

[1] After 3 years, $143; after 5 years, $152; on motor vessels, $227.

Data similar to those given in Table 1 are presented in Table 2 for all classes of seamen, as of January 1, of 1929, 1930, and 1931.

TABLE 2.—AVERAGE MONTHLY WAGES OF SEAMEN ON AMERICAN AND FOREIGN STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER, JANUARY 1, 1929, 1930, AND 1931

Position	American						British			Danish			Dutch		
	Private			U. S. Shipping Board											
	1929	1930	1931	1929	1930	1931	1929	1930	1931	1929	1930	1931	1929	1930	1931
Deck department:															
First mate	$182	$180	$180	$185	$185	$185	[1] $112	[1] $112	[1] $112	$137	$138	$137	$111	$111	$108
Second mate	160	159	158	165	165	165	[2] 77	[2] 77	[2] 77	97	105	105	84	84	81
Third mate	143	144	143	150	149	150	59	58	58	60	60	60	54	54	56
Fourth mate	121	121	120	128	120	127	51	51	51	60	60	60	-----	-----	-----
Boatswain	74	74	74	75	75	74	51	51	51	47	47	48	46	46	46
Carpenter	68	77	77	80	80	79	63	63	63	47	47	48	46	46	46
Seaman, able	64	61	60	62	62	63	44	43	43	42	42	42	40	40	40
Seaman, ordinary	45	45	45	47	47	47	29	28	28	21	21	21	20	20	20
Engineer department:															
Chief engineer	280	278	280	261	265	277	[3] 148	[3] 147	[3] 147	168	167	168	151	151	146
Second engineer	183	182	183	187	187	188	[4] 112	[4] 112	[4] 112	121	120	121	103	103	100
Third engineer	161	161	161	168	167	168	[5] 77	[5] 76	[5] 76	91	89	90	72	72	74
Fourth engineer	145	145	145	152	151	154	[6] 59	[6] 58	[6] 58	71	71	71	50	50	52
Junior engineer	-----	-----	-----	-----	-----	-----	51	51	51	53	51	51	-----	-----	-----
Fireman	63	64	63	65	66	66	46	46	46	43	43	43	42	42	42
Greaser	71	70	70	72	72	72	[7] 49	[7] 48	[7] 48	47	47	48	46	46	46
Water tender	71	70	71	72	72	72	49	48	48	43	43	43	-----	-----	-----
Coal passer or wiper	55	55	53	58	58	59	44	43	44	29	28	29	34	34	34
Radio operators (Class I):															
Grade I	-----	100	100	-----	105	105	-----	[8] 83	[8] 83	-----	84	67	-----	145	116
Grade II	-----	-----	-----	-----	-----	-----	-----	51	51	-----	64	51	-----	-----	67
Grade III	-----	-----	-----	-----	-----	-----	-----	34	34	-----	40	44	-----	24	27
Steward department:															
Chief steward	122	123	120	121	121	120	71	68	70	78	78	78	-----	-----	-----
Second steward	103	97	97	100	90	95	46	45	46	-----	-----	-----	-----	-----	-----
Cook	100	100	99	100	100	95	66	65	66	57	57	58	58	58	58
Second cook	81	78	77	80	80	80	43	43	43	29	28	29	52	52	52
Mess steward	49	51	48	51	47	47	40	39	40	-----	-----	-----	-----	-----	-----
Mess boy	42	44	43	43	42	43	-----	-----	-----	11	10	11	10	10	10

[1] On the largest vessels, with superior certificate, after 3 years, $122.
[2] On the largest vessels, with superior certificate, after 3 years, $83.
[3] After 3 years, $143; after 5 years, $152; on motor vessels, $227.
[4] On motor vessels, $146.
[5] On motor vessels, $95.
[6] On motor vessels, $62.
[7] On motor vessesl, $51.
[8] On vessels of Classes II and III, the wages are $72 and $63, respectively; the other grades are unchanged.

TABLE 2.—AVERAGE MONTHLY WAGES OF SEAMEN ON AMERICAN AND FOREIGN STEAM AND MOTOR CARGO VESSELS OF 5,000 GROSS TONS AND OVER, JANUARY 1, 1929, 1930, AND 1931—Continued

Position	French			German			Italian			Norwegian			Spanish [9]			Swedish		
	1929	1930	1931	1929	1930	1931	1929	1930	1931	1929	1930	1931	1929	1930	1931	1929	1930	1931
Deck department:																		
First mate	$102	$102	$102	$86	$91	$90	$72	$71	$63	$154	$155	$155	$122	$99	$73	$105	$109	$108
Second mate	63	62	63	69	74	74	60	59	52	120	121	121	81	66	50	80	82	82
Third mate	63	62	63	52	56	56	54	54	46	93	94	94	69	56	50	60	61	60
Fourth mate	----	----	----	39	40	40	----	----	----	70	71	71	----	----	45	----	----	----
Boatswain	24	26	26	35	38	38	46	36	33	47	48	48	36	29	29	46	46	46
Carpenter	24	24	24	35	38	38	35	35	32	47	47	----	33	27	22	44	44	44
Seaman, able	21	22	23	30	32	31	29	28	26	42	43	43	32	26	19	42	42	42
Seaman, ordinary	19	20	20	14	17	15	19	19	17	22	23	23	28	23	18	30	30	30
Engineer department:																		
Chief engineer	152	151	152	126	141	138	91	90	82	140	141	141	195	158	74	146	146	145
Second engineer	96	97	96	86	94	95	72	71	63	103	104	104	122	99	64	92	92	91
Third engineer	63	63	63	69	77	78	60	59	52	84	84	84	84	68	55	69	69	69
Fourth engineer	63	63	63	52	59	61	54	54	46	70	71	71	----	----	50	55	55	55
Junior engineer	----	----	----	34	39	39	----	----	----	----	----	----	----	----	----	----	----	----
Fireman	24	26	26	32	37	37	31	30	33	44	44	44	32	26	19	37	37	42
Greaser	23	23	23	34	39	39	----	----	28	25	25	25	32	26	21	43	43	44
Water tender	----	----	----	34	39	39	----	----	28	----	----	----	36	29	22	----	----	----
Coal passer or wiper	21	22	23	28	32	32	28	28	25	25	25	25	28	23	18	24	24	28
Radio operators (Class I):																		
Grade I	----	41	47	----	79	81	----	86	62	----	86	83	----	33	34	----	54	54
Grade II	----	27	35	----	----	----	----	71	51	----	----	----	----	----	----	----	----	----
Grade III	----	19	24	----	----	----	----	58	41	----	----	----	----	----	----	----	----	----
Steward department:																		
Chief steward	----	39	39	35	38	38	27	26	24	101	102	102	41	33	38	74	74	74
Second steward	----	----	----	26	32	32	----	----	----	----	----	----	----	----	25	----	----	----
Cook	23	23	23	35	38	38	32	31	28	80	80	80	37	30	35	50	50	51
Second cook	16	16	16	21	23	27	30	29	27	----	----	----	----	----	18	16	16	17
Mess steward	19	19	19	14	15	14	30	29	27	----	----	----	21	17	15	----	----	----
Mess boy	9	9	9	7	7	7	16	15	16	13	14	14	15	12	12	13	13	15

[9] Decrease for 1931 is due to exchange value of peseta.

Table 3 shows the variations in the wage rates of seamen on American merchant vessels of 500 gross tons and over, in 1931, by destination of vessel.

TABLE 3.—AVERAGE MONTHLY WAGES PAID ON AMERICAN MERCHANT VESSELS OF 500 GROSS TONS AND OVER IN 1931, BY DESTINATION OF VESSEL

Occupation	Destination of vessel								
	Great Britain	Continental Europe	South America	West Indies, Mexico, and Central America	Atlantic and Gulf coasting trade	Asia and Australia	Pacific coasting trade	Africa	Atlantic to Pacific ports and vice versa
Steam vessels:									
Able seamen	$64	$62	$60	$60	$60	$62	$65	$61	$60
Boatswains	76	75	74	73	73	74	78	73	74
Carpenters	79	78	79	80	77	78	80	79	77
First mates	185	184	179	178	173	183	171	184	179
Second mates	164	165	156	156	151	161	147	162	158
Firemen	67	65	63	63	65	63	67	64	62
Trimmers	59	58	55	54	55	57	54	57	54
First engineers	248	244	252	245	239	266	223	260	244
Second engineers	181	180	176	174	170	181	165	183	174
Chief radio operators	105	105	103	104	99	103	101	102	101
Second radio operators	90	90	87	91	85	90	78	90	90
Sailing vessels:									
Able seamen	45	45	55	57	51	45	67	45	50
Boatswains	50	50	60	57	67	57	50	50	57
Carpenters	----	----	----	----	----	----	----	----	75
First mates	75	75	82	84	90	87	102	75	127
Second mates	----	----	70	73	80	90	110	----	115

Average Weekly Earnings in New York State Factories, 1918 to 1931

THE average weekly earnings of office and shop employees in representative factories in New York State from 1918 to 1931 are shown in the following table taken from the Industrial Bulletin of the State department of labor for January, 1932:

AVERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE FACTORIES

[Includes all employees in both office and shop. The average weekly earnings are obtained by dividing the total weekly pay roll by the total number of employees on the pay roll for the given week. Reports cover the week including the 15th of the month]

Month	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
January	$16.81	$23.03	$26.52	$27.61	$24.43	$26.21	$27.81	$28.30	$29.05	$29.52	$29.21	$29.71	$29.80	$27.01
February	17.66	22.07	26.47	26.77	24.17	25.87	27.73	27.96	28.61	29.39	29.16	29.99	29.46	27.44
March	18.71	22.20	27.87	26.97	24.57	26.92	28.16	28.45	29.04	29.78	29.64	30.35	29.90	27.96
April	19.25	22.11	27.80	26.20	24.15	27.00	27.70	27.67	28.85	29.17	28.79	30.07	29.44	27.35
May	19.91	22.23	28.45	25.86	24.59	27.63	27.56	28.07	28.69	29.18	29.19	30.03	29.10	26.96
June	20.44	22.51	28.77	25.71	24.91	27.87	27.21	27.94	28.99	29.17	29.48	30.02	28.96	26.34
July	20.78	23.10	28.49	25.26	24.77	27.54	27.06	27.98	28.81	28.95	29.15	29.80	28.50	26.39
August	21.23	23.85	28.71	25.43	25.10	27.12	27.40	28.16	28.86	29.29	29.38	30.09	28.59	26.33
September	22.31	24.83	28.73	25.07	25.71	27.41	28.05	28.33	29.31	29.57	29.72	30.47	28.94	26.16
October	22.34	24.41	28.93	24.53	25.61	27.72	27.53	28.57	29.35	29.28	29.78	30.08	28.03	25.34
November	21.60	25.37	28.70	24.32	26.04	27.64	27.66	28.67	29.15	28.75	29.62	29.54	27.42	24.99
December	23.18	26.32	28.35	24.91	26.39	27.98	28.25	29.05	29.47	29.57	30.12	29.75	27.52	24.74
Average	20.35	23.50	28.15	25.72	25.04	27.24	27.68	28.26	29.02	29.30	29.44	29.99	28.81	26.42

Wages and Labor Conditions in Alaska, 1930–31

IN THE latter part of 1930 conditions affecting labor in Alaska were in general satisfactory, but in the spring of 1931 some unemployment was reported. This unemployment for the most part was the result of an influx of laborers from the States where, it was stated, labor conditions were generally unfavorable. In the same spring there was a curtailment in the Territory's fishing industry and consequently less work for the fishing population. The situation, however, improved substantially toward midsummer after a large number of construction projects throughout Alaska had been started and seasonal mining operations were under way. No labor shortages or labor disturbances were reported. Wage schedules continued "well stabilized and satisfactorily adjusted to living costs," according to the annual report of the governor of the Territory for the fiscal year ending June 30, 1931, in which the following information is also given.

In 1930 there were 27,568 persons employed in the Alaskan commercial fisheries—a decrease of 1,715 as compared with the previous year. Among these 27,568 workers there were 15,451 whites, 4,962 natives, 4,222 Filipinos, 1,258 Japanese, 771 Chinese, 733 Mexicans, 90 Negroes, and 81 miscellaneous (Kanakas, Koreans, Porto Ricans, etc.).

During 1930 there were approximately 3,820 men employed in the mining industry, which is a decrease of about 220 under the number employed during 1929. This decrease was due largely to the curtailment of operations at the copper mines. Of the men employed in the mining industry during 1930, approximately 2,220 were engaged in connection with placer mining, 98 in coal mining and 1,502 in lode mining. In addition to the above, there were perhaps between 300 and 400 men engaged in prospecting for lode and placer deposits in the Territory. Some of the increased interest in prospecting is probably due to the fact that a number of men who usually work for wages during the season were unable to find employment and engaged in prospecting instead.

The fishing industry is carried on almost entirely in the coastal districts of the first and third judicial divisions. The work season lasts from four to eight months, being dependent upon the nature and situation of the fishery.

In the first judicial division, which includes all of the southeastern part of the Territory, from 35 to 50 per cent of the labor supply is secured from the residents of the Territory, approximately 10 per cent of those so secured being native Indians. Further labor needs are met by importation from the States for the fishing season only. About 45 per cent of these imported workers are employed under the so-called "oriental contract system."

Owing to the remoteness of many of the large canneries and the sparsity of the resident population in the third division, where the largest percentage of the fishery labor is employed, from 15 to 20 per cent of the total labor is secured locally, the balance being imported from the States. Of the labor secured locally in the third division, from 50 to 80 per cent are native Indians. From 35 to 45 per cent of the labor imported into the third division during the fishery season is contract labor.

Wages

Fishing Industry

IN THE fiscal year 1930–31 the daily wages for general cannery labor resident in the Territory were as follows: In the first judicial division men received from $3.50 to $5 and women from $2 to $3.50; in the third judicial division men received from $2.50 to $5 and women from $2 to $4. All other labor in the fishing industry is remunerated according to the scale shown in the following table. In most cases board was furnished in addition to wages.

TABLE 1.—MONTHLY WAGES IN THE ALASKAN FISHING INDUSTRY, 1930-31

Occupation	First division	Third division	Occupation	First division	Third division
Foremen	$225	$230	Blacksmiths	$130	$100
Outside foremen	200	180	Firemen	100	100
Boat captains	145	150	Trapmen	90	80
Boat crews, deck hands, etc.	100	80	Cooks	115	120
Boat engineers	130	130	Flunkeys	80	70
Machinists	175	175	Iron-chink men	115	125
Machinists' helpers	100	95	Retort men	115	110
Carpenters	125	125	Storekeepers	110	100
Carpenters' helpers	90	85	Miscellaneous laborers	85	80
Pile-driver crews	90	90			

Mining Industry

Labor conditions in the mining industry in Alaska differ greatly according to the location of the mines and the character of the work. General labor in placer mining received board and from 50 to 80 cents per hour, 8 to 10 hours constituting a shift. The cost of board per day was from $1.50 in the Cook Inlet region to $4 in the remote parts of the Territory such as Koyukuk and Shushana. Skilled workers' wages range from $5 per day and board for oilers in the Yentna district to $13 per day and board for dredge masters in the Iditarod-Innoko district.

Coal miners' wages were quite uniform.

Underground coal miners and timbermen receive $8.60 per day; underground laborers, trammers, and rope riders, $7.80 per day; and outside labor, $5.50 per day. Fire bosses are paid $250 per month and foremen from $250 to $300 per month. Deductions from the above wages are made for board at rates of from $1.50 to $2 per day.

With the exception of small drift-mining operations, prospecting, and development work, Alaskan placer mining is restricted to the open season—ordinarily from May or June to the freeze-up in September or October. In the fall of 1930, in the Nome district, however, some dredges were able to operate until November, and in the Fairbanks district two dredges were in operation until the middle of January, 1931. Lode mining is carried on mainly in the coastal regions of the first and third judicial divisions and absorbs about 1,500 men throughout the year.

The following table shows the wage scales for the more important lode mines of the coastal regions in 1930-31.

TABLE 2.—WAGES IN CERTAIN ALASKAN LODE MINES, 1930-31

Occupation	Per 8-hour shift	Occupation	Per 8-hour shift
Machine-drill men	$4.00–$6.00	Blacksmiths	$5.75–$7.00
Machine helpers	4.00– 5.00	Carpenters' helpers	4.00– 5.00
Muckers	4.10– 5.25	Blacksmiths' helpers	4.00– 5.50
Timbermen	5.00– 6.00	Hoisting engineers	4.00– 5.75
Trackmen	4.50– 5.25	Cagers	4.35– 5.25
Pipemen	5.00– 5.50	Laborers	3.50– 5.00
Carpenters	5.50– 7.00		

From the above wages deductions of $1 to $1.50 per day are made for board and of $1.50 to $2.40 per month for hospital and medical care.

Letting contracts for a considerable part of the underground work is a prevalent practice both at the larger lode mines and at the coal mines.

Actual Earnings in the German Woodworking Industry, March, 1931

AN INVESTIGATION of the actual earnings of the workers employed in the woodworking industry in Germany, undertaken by the Federal Statistical Office, covered 1,262 establishments employing 23,752 workers over 22 years of age; among these are 1,195 establishments with 21,442 male workers engaged in general woodworking and furniture making, and 67 establishments with 2,310 workers, including 245 female workers, engaged in musical instrument making.[1]

The following table shows the average actual hourly and weekly earnings, average hours of labor, and a comparison of actual earnings and agreement rates of wages of adult workers:

[1] Germany. Statistiches Reichsamt. Wirtschaft und Statistik, Oct. 2, 1931, pp. 734–736.

AVERAGE ACTUAL EARNINGS, AVERAGE HOURS OF LABOR, AND COMPARISON OF ACTUAL EARNINGS WITH AGREEMENT RATES, MARCH, 1931

[Conversions into United States currency on basis of mark=23.8 cents; pfennig=0.238 cent]

Industry group and class of workers	Hourly earnings [1]		Average working hours per week	Weekly net earnings		Percent actual hourly earnings are of agreement rates
	German currency	United States currency		German currency	United States currency	
Woodworking and furniture manufacture						
	Pfennigs	*Cents*		*Marks*		
Skilled workers:						
Time work	117.3	27.9	39.63	46.49	$11.06	107.3
Piece work	120.8	28.8	40.43	48.85	11.63	103.0
Semiskilled workers:						
Time work	91.9	21.9	40.62	37.34	8.89	99.4
Piece work	90.6	21.6	40.70	36.89	8.78	
Unskilled workers, time work	89.1	21.2	41.08	36.59	8.71	99.3
Musical instrument manufacture						
Male workers:						
Skilled workers—						
Time work	122.6	29.2	39.8	48.83	11.62	111.7
Piece work	126.0	30.0	34.7	43.70	10.40	103.9
Semiskilled workers, time work	95.9	22.8	38.2	36.59	8.71	97.1
Unskilled workers, time work	98.0	23.3	40.2	39.39	9.37	103.2
Female workers:						
Skilled workers, piece work	74.9	17.8	29.2	21.88	5.20	96.1
Semiskilled workers—						
Time work	65.8	15.7	38.5	25.34	6.03	112.8
Piece work	67.6	16.1	34.7	23.48	5.59	105.1

[1] Including additional pay for overtime, night, Sunday, and holiday work, and for installation and repair work.

Actual Earnings in the Confectionery, Baking, and Pastry Trades in Germany in March, 1931

AN INVESTIGATION of the actual earnings of workers in the German confectionery, baking, and pastry trades in March, 1931, covering 299 establishments with 33,405 workers in 137 localities in Germany was undertaken by the German Federal Statistical Office.

The average actual hourly and weekly earnings and weekly working hours in these trades, as shown by that study, are given in the following tables.[1]

[1] Germany. Statistisches Reichsamt. Wirtschaft und Statistik, Nov. 1, 1931, pp. 767-770.

TABLE 1.—AVERAGE HOURLY EARNINGS IN CONFECTIONERY, BAKING, AND PASTRY TRADES, MARCH, 1931

[Conversions into United States currency on basis of pfennig=0.238 cent]

Class and age of workers	Average hourly earnings		Agreement hourly rates on time or piece work basis		Per cent actual earnings form of agreement wages
	German currency	United States currency	German currency	United States currency	
Skilled workers, male:	*Pfennigs*	*Cents*	*Pfennigs*	*Cents*	
20-23 years—time work	91.8	21.8	89.3	21.3	102.1
Over 23 years—					
Time work	109.3	26.0	101.1	24.1	107.4
Piece work	129.2	30.7	119.1	28.3	108.2
Unskilled workers, male:					
18-20 years—time work	60.9	14.5	59.7	14.2	100.1
20-23 years—time work	77.9	18.5	76.0	18.1	101.3
Over 23 years—					
Time work	89.3	21.3	85.8	20.4	103.1
Piece work	104.1	24.8	97.8	23.3	105.9
Female workers:					
16-18 years—					
Time work	33.5	8.0	32.7	7.8	101.6
Piece work	43.0	10.2	38.8	9.2	110.1
18-20 years—					
Time work	47.1	11.2	46.4	11.0	100.6
Piece work	57.5	13.7	55.1	13.1	104.0
Over 20 years—					
Time work	58.0	13.8	56.0	13.3	103.0
Piece work	67.7	16.1	65.6	15.6	102.8

TABLE 2.—AVERAGE WEEKLY HOURS OF LABOR AND EARNINGS IN CONFECTIONERY, BAKING, AND PASTRY TRADES, MARCH, 1931

[Conversions into United States currency on basis of mark=23.8 cents]

Class and age of workers	Hours of labor per week	Weekly earnings	
		German currency	United States currency
		Marks	
Skilled workers, male, time and piece work	46.6	51.54	$12.27
20-23 years, time work	45.6	41.81	9.95
Over 23 years—			
Time work	47.0	51.35	12.22
Piece work	44.5	57.48	13.68
Unskilled workers, male, time and piece work	46.6	40.49	9.64
18-20 years, time work	48.1	29.32	6.98
20-23 years, time work	47.0	36.59	8.71
Over 23 years—			
Time work	46.4	41.44	9.86
Piece work	47.4	49.31	11.74
Female workers, time and piece work	44.4	25.18	5.99
16-18 years—			
Time work	42.7	14.30	3.40
Piece work	40.9	17.57	4.18
18-20 years—			
Time work	45.0	21.17	5.04
Piece work	43.1	24.82	5.91
Over 20 years—			
Time work	44.8	25.97	6.18
Piece work	44.5	30.08	7.16

Cut in English Dock Workers' Wage Rates [1]

ON JANUARY 4, 1932, a new agreement as to wage rates for dockers in the English ports became effective, as the result of long negotiations. Up to that date there had been no change in wages since 1924, when the daily rate was fixed at 12s. for the large ports and 11s. for the smaller ports. As early as May, 1931, negotiations for a change were begun, the employers demanding a cut of 2s. a day in wages and drastic changes in conditions of employment, demands which the men resisted determinedly. A deadlock was reached, and for a time serious trouble seemed imminent, but after consideration both sides receded from their uncompromising attitude, and the employers presented modified proposals which were referred to a subcommittee of the industrial council for the port industry. This body succeeded in evolving a solution which has been accepted by both sides.

Under the new terms, day wages are reduced by 10d. a day, and piece rates by 7 per cent, with a minor modification relating to overtime at the week end. Day rates will therefore be 11s. 2d. in the large ports and 10s. 2d. in the small ports, rates which, the Manchester Guardian points out, are actually higher than the rates paid from October, 1922, to June, 1924. No changes are to be made in the working conditions established by earlier agreements.

[1] Data are from Economist (London), Dec. 12, 1931, p. 1118; and Manchester Guardian, Dec. 12, 1931, p. 11.

General Survey of Wages in Austria [1]

THERE is no central organization in Austria which compiles statistics of actual wages for the whole territory of the Republic. There are seven chambers of labor, at Vienna, Graz, Linz, Salzburg, Klagenfurt, Innsbruck, and Feldkirch, the one at Vienna being the most important. All seven chambers collect considerable data on minimum wages, but, with the exception of the Vienna Chamber, do not present them in statistical form.

Hours of Labor

THE hours of labor (full time) are fixed in Austria by law at 8 per day, and 48 per week. A number of factories, when working full time, work more than 8 hours per day but close at noon on Saturday.

Due to the prevailing economic depression a large number of companies in Austria are now working short time. In many instances arrangements have been made between the companies and the workers to cut down the hours of labor instead of dismissing part of the workmen. At present the 42-hour week is very frequent in Austria, but in many cases the working hours have been cut down even to 3 or 4 days per week. In some mines the laborers are divided into two groups which alternate in employment, one group working one week and the other working the next week.

All weekly wages given in this report are based on the 48-hour week. In making conclusions as to the actual income of the laborer, it should be noted that, at present, only a small proportion of laborers are drawing the full weekly wages.

Payment for Overtime

MOST collective agreements provide that ordinary overtime shall be paid for at 50 per cent above the normal rate. The rates for so-called "night work" (*Nachtarbeit*)—usually after 8 p. m.—is 100 per cent higher than the normal rate. The provisions concerning night work are, of course, not applied in cases of companies working in two or three 8-hour shifts. Work on Sundays and legal holidays is paid for at double the normal rate.

Holidays, Vacations, etc.

THE number of holidays in Austria is relatively very large. It is difficult to decide which of these holidays are considered as legal, as there is practically no uniformity as to the recognition of the various holidays. Certain holidays, such as November 12 and May 1, are considered legal State holidays and are generally recognized as such. As regards religious holidays, however, certain ones are recognized by the Government, by banks and various financial institutions as full holidays and a number as half holidays. The number of church holidays recognized by industry in general is smaller than that recognized by Government bureaus, banks, etc.

As regards the payment for holidays, there is the same lack of uniformity as in regard to the recognition of holidays. Collective agree-

[1] This report was prepared by Ernest L. Harris, American Consul General, Vienna, Austria.

ments differ greatly as regards the number of paid holidays. According to information obtained from the Vienna Chamber of Labor there are many companies in Austria which pay for no holidays whatsoever. About 90 per cent of the companies in the metal industry, the most important branch of industry in Vienna, pay for no holidays. The allowance of 2 to 5 paid holidays per annum is frequent in other industries. The largest number of paid holidays, 15 per annum, is found in the graphical industry (*graphische Industrie*). It is not unusual in Austria for the number of holidays recognized by certain industries to be much larger than the number of paid holidays. Consequently, it happens frequently that the wage for certain weeks which include recognized holidays is smaller than the normal weekly wage. This should be considered when making conclusions as to the actual income of the workers.

Sex and Age Differences Recognized in Wage Fixing

In Austria a system of wage payment according to age is current. Under this arrangement, a worker in a given occupational group is graded and paid on a sliding-scale basis. Thus, the young worker may look forward to automatic increases in wages up to 22 or 24 years of age. In certain instances gradations of pay are based on the number of years in service subsequent to completion of apprenticeship.

Wages of female employees are usually 20 to 30 per cent and even more below the wages of males of the same occupational group. Figures given in Table 2 clearly illustrate the extent to which the sex difference is recognized in wage fixing.

Payments Supplementary to Wages

According to information obtained from the Chamber of Labor, family allowances are not usual in Austria, as far as laborers are concerned. Certain Styrian coal mines pay, in addition to the normal wage, an allowance of 2 groschens [2] (0.3 cent) per child for every hour of labor.

Payments in kind are usual in Austria as regards farm laborers. The latter usually get board and lodging and, in some instances, even clothes. In industry, however, payments in kind are not customary. The Styrian coal mines, in addition to the wage, allow 400 kilograms (882 pounds) of lignite per month to every worker. The sugar industry grants the following payments in kind, in addition to the normal wage: 3,600 kilograms (7,936 pounds) of coal; 50 kilograms (110 pounds) of cube sugar; 1 cubic meter (423.799 feet board measure) of hard wood; 30 kilowatt hours of electric current; 12 schillings ($1.69), rent allowance; and the use of 1,000 square meters (0.247 acre) of farming land.

The Austrian Tobacco Monopoly gives certain quantities of cigarettes or cigars, or tobacco to its workers. Breweries grant a certain quantity of beer per day, and certain foodstuff industries sell their products at reduced prices to their employees. With few exceptions, these payments in kind are allowed on the basis of private agreements between the company and the workers and are, therefore, not included in collective agreements.

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[2] Conversions into United States currency on basis of schilling (100 groschen) = 14.07 cents.

Free housing is usual in case of laborers working on farms and in forests. Some of the larger factories and mines in rural districts have their own workmen's houses. The worker usually pays a rent which is just large enough to pay for the upkeep of the house. The company receives no return on the invested capital. The financial benefit of the worker, however, is negligible, as rents are very low in Austria.

Most of the new workmen's houses erected after the war have little gardens which can be used by the tenants for the cultivation of vegetables, fruits, etc. The space is usually very small and the financial benefit derived from the use of such garden land is comparatively little.

Deductions from Wages

THERE is no special wage tax in Austria. Social insurance contributions are relatively very high in Austria. In Table 1 there is shown a summary of contributions to be made by both employers and employees in Vienna toward social welfare institutions, as far as they are collected by the Vienna Sick Insurance Bureau. These contributions represent, for the most part, practically all the expenditure for social welfare. They do not, however, include contributions for accident insurance, which are paid by the employer. The latter has to bear two more items of expenditure which fall under the category of social welfare, namely, the so-called "Krankengeld" or a certain sum of money which the employee receives from the employer in case of sickness, and the so-called "Urlaubsentgelt" or continued payment of a worker while on his regular leave of absence.

The scale of contributions for social insurance is shown in Table 1. As may be seen from the table, in the lowest class, comprising wages up to 95 cents per week, the total contributions for the various funds amount to 20 cents per week, or more than 20 per cent of the wage. Of these contributions, 11 cents must be paid by the employee and 9 cents by the employer. Consequently, the laborer earning 95 cents per week must pay 11.5 per cent of his wage for social contributions.

It should be mentioned, however, that there are very few workers in Austria earning only 95 cents per week or less; 11 per cent fall in class 9, thus earning more than $4.05 per week, and 65 per cent fall in class 10, earning more than $5.07 per week.

A worker who earns $4.10 per week pays 48 cents for social welfare contributions, or almost 12 per cent, while a worker with a weekly wage of $5.10 pays 54 cents, or more than 10 per cent of his wage, for social welfare contributions. However, as the weekly contributions borne by the laborer can never be more than 54 cents, the percentage of the wage thus deducted forms a decreasing per cent of the wage. If he is a highly skilled worker and receives a weekly wage of $12, the deductions from his wage amount to only 4.5 per cent.

In the classification of the laborers into wage classes, not only the actual cash wage but also bonuses, tips, payments in kind, etc., are included.

TABLE 1.—SCHEDULE OF WORKERS' CONTRIBUTIONS FOR SOCIAL INSURANCE, JUNE 1, 1931

Wage class (weekly wages)	Weekly contribution (in cents) toward—							Total
	Sickness insurance	Unemployment relief fund	Distress relief fund	Old-age pension	Maintenance of employment	Chamber of labor	Establishment ofsettlements	
Class 1 (up to $0.95):								
Employee	5.07	3.37	1.27	0.70	0.56	0.42	-------	11.39
Employer	2.53	3.37	1.27	.70	.56	-------	0.14	8.57
Total	7.60	6.74	2.54	1.40	1.12	.42	.14	19.96
Class 2 ($0.95 to $1.17):								
Employee	5.91	3.94	1.55	.84	.56	.42	-------	13.22
Employer	2.95	3.94	1.55	.84	.56	-------	.14	9.98
Total	8.86	7.88	3.10	1.68	1.12	.42	.14	23.20
Class 3 ($1.17 to $1.46):								
Employee	7.32	4.92	1.97	1.13	.56	.42	-------	16.32
Employer	3.66	4.92	1.97	1.13	.56	-------	.14	12.38
Total	10.98	9.84	3.94	2.26	1.12	.42	.14	28.70
Class 4 ($1.46 to $1.58):								
Employee	8.44	5.77	2.25	1.27	.56	.42	-------	18.71
Employer	4.22	5.77	2.25	1.27	.56	-------	.14	14.21
Total	12.66	11.54	4.50	2.54	1.12	.42	.14	32.92
Class 5 ($1.58 to $2.03):								
Employee	9.85	6.61	2.53	1.55	.56	.42	-------	21.52
Employer	4.92	6.61	2.53	1.55	.56	-------	.14	16.31
Total	14.77	13.22	5.06	3.10	1.12	.42	.14	37.83
Class 6 ($2.03 to $2.53):								
Employee	12.66	8.58	3.38	1.83	.56	.42	-------	27.43
Employer	6.33	8.58	3.38	1.83	.56	-------	.14	20.82
Total	18.99	17.16	6.76	3.66	1.12	.42	.14	48.25
Class 7 ($2.53 to $3.04):								
Employee	15.48	10.41	4.08	2.39	.56	.70	-------	30.62
Employer	7.74	10.41	4.08	2.39	.56	-------	.14	25.32
Total	23.22	20.82	8.16	4.78	1.12	.70	.14	55.94
Class 8 ($3.04 to $4.05):								
Employee	19.70	13.36	5.21	2.95	.56	.70	-------	42.48
Employer	9.85	13.36	5.21	2.95	.56	-------	.14	32.07
Total	29.55	26.72	10.42	5.90	1.12	.70	.14	74.55
Class 9 ($4.05 to $5.07):								
Employee	22.51	15.19	5.91	3.37	.56	.70	-------	48.24
Employer	11.26	15.19	5.91	3.37	.56	-------	.14	36.43
Total	33.77	30.38	11.82	6.74	1.12	.70	.14	84.67
Class 10 (over $5.07):								
Employee	25.33	17.16	6.61	3.80	.56	.70	-------	54.16
Employer	12.66	17.16	6.61	3.80	.56	-------	.14	40.93
Total	37.99	34.32	13.22	7.60	1.12	.70	.14	95.09

Apprentices, during the first two years of apprenticeship, are usually grouped under wage class 1. For the remaining time of apprenticeship they are included in class 2. However, if their weekly wage exceeds 10 schillings ($1.41) they must be grouped the same way as all other laborers in accordance with the schedule given in the table. The social welfare contributions of apprentices must be paid entirely by the employer. The same applies to laborers who receive no cash wage whatsoever.

The contribution for unemployment insurance is equal to 90 per cent of the contribution for sickness insurance. In Vienna and Lower Austria the contribution toward the distress relief fund equals 35 per cent of the contribution for sickness insurance, while in other Provinces it ranges from 25 to 45 per cent. The contribution for old-age pensions is equal to 20 per cent of the contribution for sickness insurance fund.

As can be seen from the above table, the contribution toward the maintenance of the employment bureau and toward the establishment of settlements amounts to 1.12 cents and 0.14 cent, respectively, for all wage classes, a total of 1.26 cents. For laborers of the Vienna building industry these two contributions amount to 2.53 cents instead of 1.26 cents for all wage classes. In this industry employer and employee each pay 50 per cent of these contributions.

Wage Trends and Living Costs

NUMEROUS increases in minimum wage rates for the Vienna district could be noted during the second half of 1929. There were scarcely any industries where minimum wages remained unchanged during that period. The increases fluctuated widely, from 2 to 20 per cent. Wages paid by the electric bulb and cable industry showed an increase of from 23 to 40 per cent. However, this abnormally large increase was due to the fact that increases of actual wages since 1925 were included in a new collective agreement.

The upward trend in wage rates continued during the first half of 1930, but was far less accentuated than during 1929. The number of industries which increased their wages and the percentage increases were proportionally much smaller than during 1929, ranging from 0.72 to 9.24 per cent.

The collective agreements of the strong current and weak current industry were combined in a new agreement. The latter showed increases up to 39 per cent. However, actual wages were increased only slightly. This is accounted for by the fact that for a number of years actual wages paid had surpassed the minimum rates fixed by the last collective agreement in 1924. The same was true with regard to the brass furniture and safe industries, where actual wages remained practically unchanged, while, on the other hand, minimum wage rates were increased by as much as 39.5 per cent.

A wage increase in the dyeing industry of about 1 per cent, which was agreed upon in 1929, became effective during the first half of 1930.

After June, 1930, the upward trend in minimum wage rates came to an almost complete standstill. It was during the second half of 1930 that the first wage reduction on the basis of a collective agreement was reported.

There were practically no increases in wage rates during 1931. An increase which occurred in the building industry was cancelled again. According to information obtained from the Chamber of Labor, wage reductions have been frequent since the beginning of 1931, but no statistics are at present available on these reductions. Collective agreements concluded during 1931 show reductions of 4, 5, and 6 per cent in the minimum wages in some groups of the metal industry.

Actual wages in many industries were reduced even more, sometimes as much as 15 and even 20 per cent. In many cases, reductions of actual wages do not necessitate the conclusion of new collective agreements, because the unreduced actual wages were higher than those fixed by collective agreements.

Summarizing, it may be said that at present a marked downward trend in wages can be noted. This trend brings actual wages closer to the level of the minimum wage rates established by collective agreements.

The group of workers engaged in manufacturing, commerce, and trade is the most important in Austria. There are certain statistics compiled on the income of these laborers, but notwithstanding this fact, it is very difficult to come to a conclusion as to the average wage of all these laborers.

According to statistics compiled by sickness insurance institutions, the average weekly wage may be estimated at about 40 schillings ($5.63). On the other hand, the average calculated by the Vienna Chamber of Labor considerably exceeds this figure. It amounts to 48 schillings ($6.75). This average takes into consideration the difference between wages paid in Vienna and those paid in other industrial districts of Austria; the Vienna Chamber of Labor estimates the average weekly wage of a skilled laborer at 54 schillings ($7.60), that of an unskilled laborer (helper) at about 42 schillings ($5.91).

These averages, when calculated on a gold basis and compared with corresponding pre-war figures, show an increase of about 42 per cent. Due to the increase in the cost of living since 1914, the purchasing value of these wages has not kept pace with the increase in wages. However, it is estimated that since 1914 the purchasing value of wages of laborers engaged in manufacturing, commerce, and trade has, on the average, increased by about 37 per cent.

Wages in Vienna

In January, 1930, comprehensive wage statistics for the Vienna district were published by the Federal Bureau for Statistics (*Bundesamt für Statistik*). Since that time only changes in wage rates during 1930 have been published. On the basis of these publications, the 1929 statistics have been revised and are shown in Table 2. Changes in wage rates which occurred during 1931 could not be taken into consideration as they have not been published.

TABLE 2.—MINIMUM WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE VIENNA DISTRICT, DECEMBER 31, 1930

[Conversions into United States currency on basis of schilling=14.07 cents]

Industry, and occupation or class of worker	Minimum weekly wages	
	Austrian currency	United States currency
Brick industry	*Schillings*	
Skilled workers	48.38–53.18	$6.81–$7.48
Laborers, male	34.56	4.86
Laborers, female	23.42	3.30
Youthful laborers, male	19.58	2.75
Youthful laborers, female	15.26	2.15
Cement industry		
Skilled workers over 22 years	51.84	7.29
Skilled workers under 22 years	49.92	7.02
Helpers, unskilled, under 22 years	44.16	6.21
Women, 18–22 years old	27.84	3.92
Laborers, male, under 17 years	22.08	3.11
Laborers, female, under 18 years	22.08	3.11
Clothing industry		
Men's tailors, large concerns:		
Class Ia firms	68.09	9.58
Class IIb firms	48.26	6.79
Cutters, highly skilled	87.70	12.34
Cutters, beginners	60.24	8.48
Men's tailors, small concerns:		
Class Ia firms	68.09	9.58
Class IIb firms	48.31	6.80
Ladies' tailors:		
Laborers, male, working independently	48.00–71.04	6.75–10.00
Jacket workers, female	34.56–57.12	4.86–8.04
Women working independently	28.80–42.72	4.05–6.01
Helpers, after five years	23.04–38.88	3.24–5.47
Finished apprentices	13.92–25.44	1.96–3.58
Ready-made clothes:		
Cutters and master tailors	62.88	8.85
Master tailors, female	36.48	5.13
Cutters	51.84	7.29
Pressers	51.84	7.29
Helpers, female, over 16 years	33.12	4.66
Men's ready-made clothes:		
Independent workers, male	49.44	6.96
Other workers, male	38.88	5.47
Finished apprentices, under 20 years	28.80	4.05
Waist making:		
Independent waist makers, female	33.44	4.71
Independent waist finishers, female	31.68	4.46
Finished apprentices after 1 year	22.88	3.22
Artificial flower and feather industry:		
Forewomen	36.50	5.14
Laborers, female, after 4 years	23.30	3.28
Finished apprentices	19.40	2.73
Helpers, female	19.40	2.73
Men's hat industry:		
Skilled workers, piece rate	50.00–70.00	7.04–9.85
Semiskilled workers	37.80–56.70	5.32–7.98
Women	24.80–34.00	3.49–4.78
Women's hat industry:		
Finishers, time workers—		
Under 22 years	61.00	8.58
Over 22 years	70.00	9.85
Finishers, piece workers	50.00–80.00	7.04–11.26
Straw hat sewers, female, skilled—		
Time workers	64.00	9.00
Piece workers	28.00–55.00	3.94–7.74
Milliners:		
Hand workers, female—		
Independent	33.00	4.64
Not independent	27.00	3.80
Helpers, female	21.00	2.95
Furriers:		
Male workers	38.97–77.93	5.48–10.96
Machine operators, female	47.78	6.72
Trimmers, female	21.35–42.68	3.00–6.01
Preparers	79.20	11.14
Pressers, female	35.52	5.00
Helpers, female	32.16	4.52

TABLE 2.—MINIMUM WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE VIENNA DISTRICT, DECEMBER 31, 1930—Continued

Industry, and occupation or class of worker	Minimum weekly wages	
	Austrian currency	United States currency
Chemical industry		
Chemical-technical industry:	*Schillings*	
Skilled workers	46.08	$6.48
Skilled helpers	38.88–43.68	5.47–6.15
Unskilled helpers over 17 years	37.92	5.34
Forewomen	26.40	3.71
Helpers, female	24.00	3.38
Match industry:		
Inspectors	51.84	7.29
Skilled workers	50.88	7.16
Machine operators	46.56	6.55
Machine helpers, female	27.36	3.85
Unskilled helpers, female	26.40	3.71
Lacquer and printers' ink industry:		
Skilled workers	54.24	7.63
Unskilled helpers over 17 years	45.12	6.35
Machine operators, female	31.20	4.39
Helpers, female, over 17 years	29.76	4.19
Oil, soap, perfumery, etc., industry:		
Skilled workers	55.68	7.83
Skilled machine attendants	53.76	7.56
Unskilled laborers	47.52	6.69
Forewomen	32.44	4.56
Machine operators, female	29.28	4.12
Mineral oil refineries:		
Skilled workers, over 22 years	65.76	9.25
Steam boiler firemen, over 22 years	60.48	8.51
Skilled helpers, male, over 22 years	56.76	7.99
Skilled laborers, female, over 17 years	36.00	5.07
Unskilled helpers, male, over 17 years	53.76	7.56
Unskilled helpers, female, over 17 years	34.08	4.80
Paper industry		
Special laborers	54.72–56.64	7.70–7.97
First machine helpers	44.64–46.56	6.28–6.55
Attendants, under 17 years	20.64	2.90
Sorters, female	24.00–25.44	3.38–3.58
Helpers, female	20.64–24.00	2.90–3.38
Rubber industry		
Skilled workers	57.60	8.10
Skilled workers, piece work	53.80–58.80	7.57–8.27
Unskilled helpers, male	43.60	6.13
Sugar refining		
Workers in—		
Group I	52.32	7.36
Group II	48.42	6.81
Group V	36.24	5.10
Group VII	35.28	4.96
Group IX	16.92	2.38
Glass industry		
Glass blowers, during first year	37.30	5.25
Skilled workers	79.52	11.19
Skilled workers, piece rate	100.00	14.07
Polishers—		
After first half-year	36.48	5.13
After first year	50.88	7.16
After fifth year	73.44	10.33
Bookbinding		
Bookbinders, during first year	29.50	4.15
Skilled bookbinders	58.25	8.20
Special workers:		
During first year	30.45	4.28
During third year	47.20	6.64
Female workers:		
During first half year	14.05	1.98
After second half year	33.75	4.75
Special workers, female:		
During first half year	15.30	2.15
After two years	35.10	4.94
Helpers:		
Under 20 years	25.40	3.57
Over 20 years	28.15	3.96

TABLE 2.—MINIMUM WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE VIENNA DISTRICT, DECEMBER 31, 1930—Continued

Industry, and occupation or class of worker	Minimum weekly wages	
	Austrian currency	United States currency
Cigarette industry		
	Schillings	
Machine operators, under 18 years	27.80	$3.91
Skilled helpers, female:		
Over 16 years	26.50	3.73
Over 18 years	27.10	3.81
Machine operators over 18 years	40.80	5.74
Forewomen	30.90	4.35
Mechanics attending tube machines, over 24 years	62.10	8.74
Wood industry		
Skilled woodworkers, joiners, piano makers, upholsterers, basket makers, woodcutters	63.84–67.20	8.98–9.46
Finished apprentices:		
During first year	24.00–48.00	3.38–6.75
During second year	45.60–49.44	6.42–6.96
Skilled workers, minimum wage	48.00	6.75
Skilled helpers, male	44.16	6.21
Unskilled helpers, male	41.76	5.88
Skilled helpers, female	38.88	5.47
Unskilled helpers, female	32.64	4.59
Leather industry		
Pocketbook workers:		
Highly skilled workers	66.00	9.29
Skilled workers, over 22 years	51.30–61.70	7.22–8.68
Manufacture of fiber suitcases and trunks:		
Helpers, beginners	31.50	4.43
Helpers, skilled	46.50	6.54
Helpers, female, beginners	25.50	3.59
Helpers, female, skilled	38.00	5.35
Leather-belt making:		
Skilled workers, over 22 years	49.44–62.40	6.96–8.78
Helpers	44.64	6.28
Harness makers:		
Over 22 years	65.08	9.16
Piece rate, average	80.00	11.26
Leather workers:		
Skilled workers	56.16–61.92	7.90–8.71
Helpers	54.72	7.70
Food and drink industries		
Bakeries:		
Workers in mechanically equipped plants—		
Employing up to 3 helpers	76.60	10.78
Employing more than 3 helpers	77.20	10.86
Helpers	46.30	6.51
Workers in nonmechanically equipped concerns—		
Employing up to 3 helpers	75.60	10.64
Employing more than 3 helpers	76.10	10.71
Breweries:		
Foremen	88.47	12.45
Skilled workers	84.59	11.90
Skilled helpers	74.78	10.52
Fermenting-room helpers	67.69	9.52
Other helpers—		
Males	61.35	8.63
Females	38.07	5.36
Milling industry:		
First machine attendants	56.16–61.44	7.90–8.64
Skilled workers	52.80–57.60	7.43–8.10
Helpers, males	46.08–50.88	6.48–7.16
Helpers, females	27.28–32.12	3.84–4.52
Tobacco industry:[1]		
Workers, female, general	40.80	5.74
Wrappers, female, and general workers, male	50.28	7.07
Forewomen, overseers, and machine operators, male	55.92	7.87
Tobacco dampers, roasters, cutters, male	62.76	8.83
Skilled workers	67.68	9.52
Vinegar and liquor production:		
Vinegar masters	76.80	10.81
Coopers, foremen	68.10	9.58
Helpers, male	60.50	8.51
Helpers, female	34.30	4.83

[1] Government monopoly.

TABLE 2.—MINIMUM WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE VIENNA DISTRICT, DECEMBER 31, 1930—Continued

Industry, and occupation or class of worker	Minimum weekly wages	
	Austrian currency	United States currency
Food and drink industries—Continued		
Sugar goods production (in factories):	*Scnillings*	
Managers of divisions	71.28	$10.0
Pastry cooks, over 24 years	60.96	8.5
Skilled workers, male, drivers	57.12	8.0
Helpers, male—		
Over 20 years	50.40	7.0
Under 20 years	41.76	5.8
Helpers, female, under 18 years	25.44	3.5
Metal industry (factories)		
Strong current industry:		
Assistant fitters and skilled workers, male, after two years, over 22 years	56.16	7.9
Assistants of fitters and skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, male, over 22 years	45.10	6.3
Workers, female, over 22 years	28.80	4.0
Weak current industry:		
Skilled workers, male, after 3 years	40.80	5.7
Skilled helpers, over 24 years	40.80	5.7
Unskilled helpers, over 24 years	35.52	5.0
Workers, female, over 20 years	20.64	2.9
Silversmiths:		
Skilled workers, after 3 years	57.60	8.1
Skilled helpers, over 24 years	47.52	6.6
Unskilled helpers, over 24 years	42.24	5.9
Workers, female, over 20 years	26.40	3.7
Electric bulb industry:		
Skilled workers, after 3 years	56.10	7.8
Skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 24 years	45.12	6.3
Workers, female, over 20 years	28.80	4.0
Cable factories:		
Skilled workers, after 3 years	56.16	7.9
Skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 22 years	45.12	6.3
Workers, female, over 20 years	28.80	4.0
Locomotive factories:		
Skilled workers, after 3 years	52.80	7.4
Skilled helpers, over 24 years	47.52	6.6
Unskilled helpers, over 24 years	42.24	5.9
Workers, female, over 20 years	26.40	3.7
Iron foundries:		
Hand molders, after 3 years	57.60	8.1
Other skilled workers, after 3 years	52.80	7.4
Semiskilled workers, over 20 years	52.80	7.4
Foundry helpers, after 3 years	48.00	6.7
Other helpers, over 24 years	42.24	5.9
Workers, female, over 18 years	28.80	4.0
Iron construction:		
Fitters and skilled workers, after 3 years	56.16	7.9
Assistants of fitters and skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 24 years	45.12	6.3
Workers, female, over 20 years	28.80	4.0
China-silver industry:		
Skilled workers, after 3 years	57.60	8.1
Skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 24 years	45.12	6.3
Workers, female, over 20 years	28.80	4.0
Brass furniture industry:		
Skilled workers, after 3 years	56.16	7.9
Skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 22 years	45.12	6.3
Laborers, female, over 20 years	28.80	4.0
Surgical-instrument makers:		
Skilled workers, after 3 years	56.16	7.9
Skilled helpers, over 24 years	50.40	7.0
Unskilled helpers, over 24 years	45.12	6.3
Workers, female, over 20 years	28.50	4.0
Small concerns:		
Mechanics—		
Skilled workers, over 22 years	57.60	8.1
Workers, female, over 18 years	31.20	4.3
Steel and metal polishers, after 3 years	72.96	10.2

TABLE 2.—MINIMUM WEEKLY WAGES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE VIENNA DISTRICT, DECEMBER 31, 1930—Continued

Industry, and occupation or class of worker	Minimum weekly wages	
	Austrian currency	United States currency
Metal industry (factories)—Continued		
Small concerns—Continued.		
Lathe operators—	*Schillings*	
Helpers, after 3 years	62.40	$8.78
Helpers, over 22 years	45.12	6.35
Workers (helpers), female, over 20 years	30.72	4.32
Coppersmiths—		
Skilled workers, after 4 years	62.40	8.78
Helpers, over 20 years	43.20	6.08
Metal pressers—		
Helpers, after 3 years	72.00	10.13
Helpers, over 22 years	45.12	6.35
Helpers, over 20 years	30.72	4.32
Textile industry		
Spinning mills:		
Spinners, minimum wage	31.68	4.46
Spinners, average piece rate	44.50	6.26
Combers, female	22.08	3.11
Spoolers (winders, reelers), female	21.60	3.04
Helpers, male	26.88	3.78
Helpers, female	21.60	3.04
Weaving mills:		
Weavers, minimum wage	25.82	3.63
Weavers, average piece rate	34.50	4.85
Weavers, female	23.76	3.34
Spoolers, female	22.08	3.11
Haberdashery:		
First haberdasher, first year	39.36	5.54
Second haberdasher, second year	42.24	5.94
Other haberdashers	42.72–60.00	6.01–8.44
First haberdashers, female, first year	27.36	3.85
Second haberdashers, second year (female)	29.76	4.19
Other haberdashers, female	30.24–36.00	4.25–5.07
Knitting establishments:		
Knitters, machine, male and female	49.92	7.02
Skilled cutters, female	33.16	4.67
Helpers, female, over 17 years	23.04	3.24
Young workers—		
Between 14 and 15 years	14.88	2.09
Between 16 and 17 years	18.24	2.57
Hand-printing establishments:		
Hand printers	62.40	8.78
Skilled helpers, male—		
After 6 months	47.04	6.62
Over 17 years	43.68	6.15
Skilled helpers, female—		
After 6 months	35.04	4.93
Over 17 years	32.16	4.52
Young workers—		
Up to 15 years	19.20	2.70
Between 15 and 17 years	23.04	3.24
Dyeing establishments:		
Skilled dyers	57.12	8.04
Dyers working independently	62.40	8.78
Skilled helpers	50.40	7.09
Helpers	46.08	6.48
Skilled helpers, female	37.44	5.27
Film industry		
Studio workers:		
Theater managers	[2] 372.42–381.84	[2] 52.40–53.72
First-class electricians	80.35–81.88	11.31–11.52
Skilled workers	76.21–77.65	10.72–10.93
Wardrobe keepers	67.74–69.28	9.53–9.75
Laboratory workers:		
Chief laboratory workers	[2] 355.40	[2] 50.00
Laboratory assistants	66.00	9.29
Helpers—		
Over 18 years	48.75	6.86
Under 18 years	30.09	4.23

[2] Monthly rate.

The wage statistics given in Table 2 represent minimum wage rates based on collective agreements in force on December 31, 1930, in the Vienna district; that is, Vienna and a number of towns and villages in its vicinity. Though this territory is the most important industrial district, it does not include a number of industries, such as lignite, iron ore, and magnesite mining, which are mainly in Styrian and Carinthian territory.

Wages in Important Austrian Industrial Districts

MORE recent wage statistics have been made available by the Association of Austrian Industry *(Hauptverband der industrie Oesterreichs)*, namely, for the end of September, 1931, and are shown in Table 3. These statistics include minimum wages, as given in collective agreements, for four different kinds of workers—skilled laborers, qualified helpers, unqualified helpers, and female helpers, for the Vienna district and also for industries located in the Provinces of Lower Austria, Upper Austria, Salzburg, Styria, and Carinthia.

TABLE 3.—ACTUAL HOURLY WAGES OF WORKERS AND HELPERS IN THE LEADING INDUSTRIAL DISTRICTS OF AUSTRIA, END OF SEPTEMBER, 1931

[Conversions into United States currency on basis of schilling=14.07 cents]

District and industry	Actual hourly wages of—							
	Skilled workers		Skilled helpers		Unskilled helpers		Female helpers	
	Austrian currency	United States currency	Austrian currency	United States currency	Austrian currency	United States currency	Austrian currency	United States currency
Vienna and lower Austria								
	Schillings		*Schillings*		*Schillings*		*Schillings*	
Cement industry	1.03–1.08	$0.14–$0.15	0.93–0.96	$0.13–$0.14	0.88–0.92	$0.12–$0.13	0.55–0.58	$0.08
Brick industry:								
Time rate	1.01–1.10	.14–.15	.72	.10	.72	.10	.49	.07
Piece rate			.94–1.50	.13–.21	.94–1.50	.13–.21	.60–.90	.08–.13
Lumber industry	1.20–1.34	.17–.19	.98–1.14	.14–.16	.94–.98	.13–.14	.70–.80	.10–.11
Barrel industry	1.46	.21	1.22–1.36	.17–.19	1.16	.16	.93	.13
Furniture carpenters	1.33–1.40	.19–.20	1.21–1.32	.17–.19	1.00–1.20	.14–.17		
Chemical industry	1.06–1.09	.15	.94–1.03	.13–.14	.91–.94	.13	.61–.66	.09
Lacquer and printers' ink industry	1.10–1.13	.15–.16	.97–1.07	.14–.15	.94–.97	.13–.14	.60–.65	.08–.09
Oil, fat, tallow, and perfumery industry	1.16	.16	1.11	.15	.99	.14	.58–.68	.08–.10
Match industry	1.06–1.08	.15	.91–.97	.13–.14	.88	.12	.53–.55	.07–.08
Chemical-technical industry	.93–.96	.13–.14	.81–.91	.11–.13	.79–.81	.11	.50–.55	.07–.08
Explosives and powder industry	1.12	.16	.99–1.07	.14–.15	.96	.14	.64–.68	.09–.10
Paper industry	1.01	.14	.884	.12	.844	.118	.53	.07
Paper manufactures	[1] 42.00–60.25	[1] 5.91–8.48	[1] 24.75–49.00	[1] 3.48–6.89	[1] 22.50–39.25	[1] 3.17–5.52	[1] 16.50–36.65	[1] 2.32–5.16
Leather industry	1.21–1.29	.17–.18	1.21–1.29	.17–.18	1.14–1.17	.16–.16	.74–.80	.10–.11
Pocketbook industry:								
Males	.62–1.28	.09–.18	.76	.11	.57–.65	.08–.09		
Females	.50–.85	.07–.12	.63	.09				
Chocolate and candy	1.27	.18	1.19	.17	1.05	.15	.64	.09
Sugar industry, lower Austria	1.02	.14	.81	.11	.79	.11	.60	.08
Preserved-food industry	1.26	.18	1.11	.16	1.02	.14	.62	.09
Mills, large concerns	[1] 52.80–61.44	[1] 7.43–8.64	[1] 48.00–54.72	[1] 6.75–7.70	[1] 46.08–50.46	[1] 6.48–7.10	[1] 27.28–32.12	[1] 3.84–4.52
Bread factories	[1] 71.88–82.28	[1] 10.11–11.58	[1] 61.24–72.58	[1] 8.62–10.21	[1] 58.26	[1] 8.20	[1] 34.46–50.00	[1] 4.85–7.04
Men's hat industry:								
Males	.79–1.18	.11–.17					[2] .09	[2] .07
Females	.50–.70	.07–.10						
Metal industry:								
Vienna, large concerns	1.31–1.53	.18–.22	1.14–1.36	.16–.19	.97–1.10	.14–.15	.67–.80	.09–.11
Average wages	1.41	.20	1.26	.18	1.04	.15	.73	.10
Piece rate	1.64–1.90	.23–.27	1.44–1.70	.20–.24	1.11–1.23	.16–.17	.93–1.00	.13–.14
Average piece rate	1.75	.25	1.59	.22	1.16	.16	.95	.13

See footnotes at end of table.

TABLE 3.—ACTUAL HOURLY WAGES OF WORKERS AND HELPERS IN THE LEADING INDUSTRIAL DISTRICTS OF AUSTRIA, END OF SEPTEMBER, 1931—Continued

District and industry	Actual hourly wages of—							
	Skilled workers		Skilled helpers		Unskilled helpers		Female helpers	
	Austrian currency	United States currency	Austrian currency	United States currency	Austrian currency	United States currency	Austrian currency	United States currency
Vienna and lower Austria—Continued								
Metal industry—Continued.								
Medium-sized concerns—	*Schillings*		*Schillings*		*Schillings*		*Schillings*	
Wages	1.27– 1.46	$0.18–$0.21	1.21– 1.40	$0.17–$0.20	0.97– 1.10	$0.14–$0.15	0.64– 0.73	$0.09–$0.10
Average wages	1.34	.19	1.34	.19	1.02	.14	.68	.10
Piece rate	1.54– 1.80	.22– .25	1.41– 1.66	.20– .23	1.21– 1.40	.17– .20	.74– .92	.10– .13
Average piece rate	1.66	.23	1.52	.21	1.32	.19	.84	.12
Small concerns—								
Wages	1.21– 1.43	.17– .20	1.24– 1.43	.17– .20	.97– 1.13	.14– .16	.58– .70	.08– .10
Average wages	1.33	.19	1.33	.19	1.05	.15	.64	.09
Piece rate	1.51– 1.80	.21– .25	1.47– 1.80	.21– .25	1.14– 1.43	.16– .20	.85– 1.00	.12– .14
Average piece rate	1.64	.23	1.75	.25	1.35	.19	.95	.13
Neunkirchen district—								
Time rate	1.26	.18	1.15	.16	.95	.133	.60	.08
Piece rate	1.56	.22	1.39	.195	1.24	.174	.72	.10
St. Poelten district, large concerns—								
Time rate	1.12	.16	1.02	.144	.87	.12	.57	.08
Piece rate	1.34	.19	1.27	.178	1.00	.14	.66	.09
St. Poelton district, medium and small concerns—								
Time rate	1.03	.14	.96	.135	.71	.10	.51	.07
Piece rate	1.44	.20	1.20	.168	.85	.12	.62	.09
Upper Austrian District								
Mills	.94– 1.06	.13– .15	.90	.13	.85	.12	.50– .60	.07– .08
Rubber industry:								
Minimum wages	.96– 1.03	.14	.79– .93	.11– .13	.76– .83	.11– .12	.53– .56	.07– .08
Average piece rate	1.18– 1.35	.17– .19	.99– 1.27	.14– .18	.92	.13	.71	.10
Match industry	1.06– 1.08	.15	.91– .97	.13– .14	.88	.12	.53– .55	.07– .08
Soap and tallow industry	1.11	.16	1.07	.15	.95	.13	.55– .65	.08– .09
Cement industry	.95	.13	.79– .85	.11– .12	.77	.11	.47	.07
Brick industry	.90– 1.00	.13– .14			.65– .72	.09– .10	.44– .49	.06– .07
Aluminum industry	1.10– 1.30	.15– .18	.85– 1.10	.12– .15	.85– .95	.12– .13		
Iron mining	1.00– 1.05	.14– .15	.95	.13	85	.12	.60	.08
Leather industry	1.00	.14	.92	.13			.65	.09

Leather industry	1.00	.14	.92	.13				
Metal manufacture	.90– 1.40	.13– .20	.85– 1.15	.12– .16	.60– .95	.08– .13	.65	.09
Furniture industry	1.15– 1.42	.16– .20	.95	.13	.75	.11	.53– .55	.07– .08
Mills	1.15– 1.27	.16– .18	1.05– 1.13	.15– .16	1.03	.14	.64	.09
Paper industry	.97– 1.08	.14– .15	.86– .91	.12– .13	.65	.09	.53– .58	.07– .08
Sawmills			.62– .82	.09– .12	.54– .74	.08– .10	.42– .48	.06– .07
Textile industry			.70– 1.15	.10– .16	.60– .80	.08– .11	.48– .62	.07– .09
Cement industry	.95	.13	.79– .85	.11– .12	.77	.11	.47	.07
Match industry	1.06– 1.08	.15	.97	.14	.88	.12	.53– .55	.07– .08
Brick industry	.80	.11			.63	.09	.40	.06
Chemical industry	.90– 1.08	.13– .15	.85– 1.05	.12– .15	.75– .90	.11– .13	.58– .69	.08– .10
Upper Styria								
Steel plants:								
Time rate	.90	.13	.73	.10	.65	.09	.49	.07
Piece rate	1.30	.18	1.13	.16	1.03	.15	.60	.08
Styria								
Bread factories	[3] 1.43– 1.55	[3] .20– .22	[3] 1.06	[3] .15	[3] .93	[3] .13		
Mills	1.08– 1.16	.15– .16	1.00	.14	.94	.13	.53	.07
Forests, average			.70	.10	.65	.09	.32	.05
Sawmills, average	.95	.13	.75– .78	.11	.70	.10	.50	.07
Cement industry	.84– .96	.12– .14	.70– .74	.10	.65– .70	.09– .10	.44	.06
Brick industry, average	1.10	.15	1.00	.14	.75– .90	.11– .13	.44– .58	.06– .08
Porcelain industry	.85– .96	.12– .13	.72– .81	.10– .11	.63– .77	.09– .11	.42– .51	.06– .07
Dye industry	.85– .95	.12– .13	.85	.12	.77	.11	.43	.06
Pencil industry	.85– .100	.12– .14	.80– .85	.11– .12	.68– .83	.10– .12	.48	.07
Paper industry	.97– 1.08	.14– .15	.86– .91	.12– .13	.85	.12	.53– .58	.07– .08
Board factories, pulp mills	.87– .92	.12– .13	.81	.11	.79	.11	.49– .54	.07– .08
Match industry	1.06– 1.08	.15	.97	.14	.88	.12	.53– .55	.07– .08
Glass industry [4]	1.12	.16	.87	.12	.68	.10	.50	.07
Leather industry	1.02– 1.12	.14– .16	.96– 1.06	.14– .15	.78– .87	.11– .12	.56– .63	.08– .09
Wool industry	.93	.13	.81	.11	.71– .73	.10	.52– .58	.07– .08
Coal mining:								
Average wage	1.25	.18	.75	.11	.60	.08	.44	.06
Minimum wage	.94	.13	.53	.07	.45	.06	.33	.05
"Herrenschichtlohn"	.90	.13	.70	.10	.45	.06	.36	.05
Carinthia								
Metal industry	.88– .130	.12– .18	.80– .86	.11– .12	.74– .80	.10– .11	.48– .58	.07– .08
Leather branch	.74– 1.20	.10– .17	.74– .95	.10– .13	.65– .87	.09– .12	.45– .80	.06– .11
Paper board and wood pulp industry	.87– .89	.12– .13	.79– .81	.11	.71– .73	.10– .10	.47– .49	.07
Wood and saw industry	.74– .84	.10– .12	.64– .74	.09– .10	.60– .70	.08– .10	.47– .51	.07
Cement industry	.84– 1.18	.12– .17	.77– .92	.11– .13	.60– .75	.08– .11	.42– .53	.06– .07
Chemical industry, minimum wage	.85	.12	.81	.11	.73	.10	.50	.07
Magnesite industry	.81– .87	.11– .12	.70– .76	.10– .11	.59– .63	.08– .09	.50– .56	.07– .08
Match industry	.97– 1.05	.14– .15	.83– .90	.12– .13	.75– .80	.11	.44– .52	.06– .07

[1] Rate per week.
[2] Young workers.
[3] Plus 3 per cent for those who work from 4 a. m.
[4] Married glass blowers receive 1.36 schillings (19 cents).

According to information obtained from the Vienna Chamber of Labor, there is a considerable difference between the wages paid in Vienna and those paid in other Austrian Provinces. In order to give an idea of these differences, the information in Table 4 was obtained from the Chamber of Labor. The figures show actual wages paid in Vienna as compared with actual wages paid in Linz, the capital of upper Austria, and Graz, the capital of Styria.

TABLE 4.—ACTUAL WEEKLY WAGES IN VIENNA, LINZ, AND GRAZ

[Conversions into United States currency on basis of schilling=14.07 cents]

Industry and occupation	Actual weekly wages in—					
	Vienna		Linz		Graz	
	Austrian currency	United States currency	Austrian currency	United States currency	Austrian currency	United States currency
Machine industry:	*Schillings*		*Schillings*		*Schillings*	
Fitters (Monteure)	56.16	$7.90	52.80	$7.43	38.40	$5.40
Lathe operators (Dreher)	62.40	8.78	52.80	7.43	38.40	5.40
Hand molders (Eisengiesser, Handformer)	57.60	8.10	52.80	7.43	38.40	5.40
Model joiners (Modellmacher)	69.60	9.79	52.80	7.43	38.40	5.40
Unskilled helpers (Ungelernte Hilfsarbeiter)	42.24	5.94	40.32	5.67	29.76	4.19
Furniture industry:						
Cabinetmakers (Tischler)	67.20	9.46	72.00	10.13	65.76	9.25
Upholsterers (Tapezierer)	67.20	9.46	72.00	10.13	65.28	9.18
Electrical installation industry:						
Skilled fitters (Elektromonteure, gelernte)	67.20	9.46	60.00	8.44	48.00	6.75
Foodstuffs industry:						
Bakers in small concerns (Baecker in genossenschaftlichen Betrieben)	76.10	10.71	78.00	10.97	70.50	9.92
Bakers, in factories (Baecker in Fabriksbetrieben)	77.20	10.86	----------	----------	71.50	10.06

Wages in Iron and Magnesite Mines

TABLE 5 was also furnished by the Vienna Chamber of Labor and shows the distribution of workers by wage classes in Styrian iron ore and magnesite mines and average actual wages paid.

TABLE 5.—AVERAGE WEEKLY WAGES PAID IN STYRIAN IRON AND MAGNESITE MINES, AND NUMBER OF WORKERS IN EACH CLASSIFIED EARNINGS GROUP

[Conversions into United States currency on basis of schilling = 14.07 cents]

Occupation	Number of workers	Number of workers with weekly earnings of—										Average wage	
		15.00–24.99 sch. ($2.11–$3.52)	25.00–34.99 sch. ($3.52–$4.92)	35.00–39.99 sch. ($4.92–$5.63)	40.00–44.99 sch. ($5.63–$6.33)	45.00–49.99 sch. ($6.33–$7.03)	50.00–54.99 sch. ($7.04–$7.74)	55.00–59.99 sch. ($7.74–$8.44)	60.00–64.99 sch. ($8.44–$9.14)	65.00–69.99 sch. ($9.15–$9.85)	70.00–90.00 sch. ($9.85–$12.66) and over	Austrian currency	United States currency
												Schillings	
Pickmen (Hauer)	775			5	11	41	44	149	173	178	174	64.00	$9.00
Pushers (Foerderer)	116		5	2	19	23	22	23	17	4	1	52.00	7.32
Skilled workers (Professionisten)	217			1	15	60	89	29	12	5	6	52.00	7.32
Machine attendants (Maschinisten and Waerter)	76		1	9	18	11	13	14	4	3	3	55.00	7.74
Helpers (Hilfsarbeiter)	371		13	61	97	97	53	27	13	6	4	46.00	6.47
Women (Frauen)	115	2	113									29.00	4.08
Juveniles (Jugendliche)	22	11	4	3	2	1						30.00	4.22
Total	1,692	13	136	81	162	233	221	242	220	196	188	54.00	7.60
Pickmen (Hauer): Piece rate	67					1	6	21	14	6	19	66.00	9.29
Pushers (Foerderer):													
Piece rate	118				10	21	37	34	16			53.00	7.46
Time rate	70		2	15	8	27	15	3				45.00	6.33
Skilled workers (Professionisten):													
Piece rate	47				1	2	9	6	14	10	5	61.00	8.58
Time rate	8					1		4	2	1		57.00	8.02
Foremen (Vorarbeiter): Piece rate	25						1	5	10	7	2	63.00	8.86
Furnace tenders (Heizer): Piece rate	10					1	1	5	3			56.00	7.88
Furnace assistants (Hilfsheizer): Piece rate	4					1	3					51.00	7.18
Molders (Former): Piece rate	7							1	5	1		62.00	8.72
Millers (Mueller): Piece rate	12				1	3			4	4		58.00	8.16
Pressers (Presser): Piece rate	26						2	16	8			59.00	8.30
Machine attendants (Maschinisten): Time rate	8			1	2	3	1	1				47.00	6.61
Sorters (Sortierer): Piece rate	8					1	4	2	1			55.00	7.74
Firemen (Heizer):													
Time rate	18		1	5	7	3	2					43.00	6.05
Piece rate	39					1	17	16	5			55.00	7.74
Qualified helpers (Qualifizierter Hilfsarbeiter):													
Time rate	18			1	6	2	5		1	2	1	50.00	7.04
Piece rate	9					3	6					50.00	7.04

TABLE 5.—AVERAGE WEEKLY WAGES PAID IN STYRIAN IRON AND MAGNESITE MINES, AND NUMBER OF WORKERS IN EACH CLASSIFIED EARNINGS GROUP—Continued

Occupation	Number of workers	Number of workers with weekly earnings of—										Average wage	
		15.00–24.99 sch. ($2.11–$3.52)	25.00–34.99 sch. ($3.52–$4.92)	35.00–39.99 sch. ($4.92–$5.63)	40.00–44.99 sch. ($5.63–$6.33)	45.00–49.99 sch. ($6.33–$7.03)	50.00–54.99 sch. ($7.04–$7.74)	55.00–59.99 sch. ($7.74–$8.44)	60.00–64.99 sch. ($8.44–$9.14)	65.00–69.99 sch. ($9.15–$9.85)	70.00–90.00 sch. ($9.85–$12.66) and over	Austrian currency	United States currency
												Schillings	
Workers at aerial railways (Bahner):													
Time rate	24			3	10	9	2					44.00	$6.19
Piece rate	4			2	2							39.00	5.49
Loaders (Lader): Time rate	42			6	32	4						42.00	5.91
Helpers (Hilfsarbeiter):													
Time rate	68	1	21	17	19	10						38.00	5.35
Piece rate	66		3	7	20	19	12	4	1			46.00	6.47
Women (Frauen):													
Time rate	36	30	6									22.00	3.10
Piece rate	20		20									28.00	3.94
Juveniles (Jugendliche):													
Time rate	6	6										19.00	2.67
Piece rate	9	1	7	1								29.00	4.08
All workers:													
Time rate	298	37	30	48	84	59	25	8	3	3	1	40.00	5.63
Piece rate	471	1	30	10	34	53	98	110	81	28	26	54.00	7.60
Total	769	38	60	58	118	112	123	118	84	31	27	49.00	6.89

Wages of Farm Laborers

ON MAY 1, 1931, Dr. Felix Klezl, a well-known economist, specializing in wage and other social statistics, published an article on the present and pre-war standard of living of the Austrian population. He comes to the conclusion that the present wages of agricultural laborers exceed the pre-war rates by about 84 per cent on the average. The present actual wage of a male farm laborer amounts to 50 schillings ($7.04) per month, as compared with about 25 schillings ($3.52) before the war, an increase of 100 per cent. The cash wage for female farm laborers increased in about the same proportion, from about 20 schillings ($2.81) per month before the war to about 40 schillings ($5.63) at present. However, it must be considered that in case of farm laborers the cash wage is not so important, while payments in kind are a very important factor. These payments have increased to a certain extent, but, of course, not in the same proportion as cash wages. Cash wages of laborers working on large farms (*Gutsarbeiter*) have increased from about 58 schillings ($8.16) in 1914 to about 80 schillings ($11.26) in 1931, an increase of almost 38 per cent.

By far the most accentuated increases occurred in cash wages paid to day laborers on farms (*landwirtschaftliche Tagloehner*). The daily cash wage of such laborers when receiving no additional payments in kind, at present amounts to about 4.50 schillings ($0.63) as compared with 2 schillings ($0.28) before the war

General Survey of Wages in Greece, 1931 [1]

WAGE rates in the manufacturing, mining, and agricultural industries in Greece given in the following tables are based in general on reports of the Hellenic Ministry of National Economy and, for the Saloniki district, upon reports of an inspector of labor, and in Patras by the local labor bureau.

There is no tax assessment upon wages in Greece. There is a compulsory insurance system,[2] however, which covers wage earners and salaried employees, although it has not yet been extended to all workers. The contributions which are divided equally between employer and employees may not be less than 3 nor more than 6 per cent of the wages or salaries of the insured. The insurance covers the risks of sickness, disability, old age, and death and includes certain benefits to families of insured workers.

The industries in the Athens consular district include a number of manufacturing industries, mining, and agriculture, while in the Saloniki district, comprising Greek Macedonia and Thrace, agriculture is the primary industry, with tobacco as the principal crop.

[1] This report was prepared by Edwin A. Plitt, American consul, Athens; C. Franklin Yeager, American vice consul, Patras; and Charles J. Pisar, American consul, Saloniki.

[2] See Bureau of Labor Statistics Bul. No. 561: Public old-age pensions and insurance in the United States and in foreign countries.

The following table shows the average daily or monthly wages of workers in various industries in Greece in 1931:

TABLE 1.—AVERAGE WAGES PER DAY OR PER MONTH OF WORKERS IN SPECIFIED INDUSTRIES IN GREECE, 1931

[Conversions into United States currency on basis of drachma=1.3 cents]

Industry and occupation	Average wages		
	Period	Amount	
		Greek currency	United States currency
Building materials			
Brick factories:		*Drachmas*	
Foremen	Day[1]	80	$1.04
Brickmakers	Day[1]	80	1.04
Workmen	Day[1]	60–80	.78–1.04
Assistants	Day[1]	40–50	.52–.65
Lime factories:			
Engineers	Mo.	3,200	41.60
Foremen	Mo.	3,200	41.60
Chief workmen	Mo.	3,000	39.00
Workmen	Day[1]	40–50	.52–.65
Assistants	Day[1]	30–35	.39–.45½
Chemicals			
Rosin factories:			
Foremen	Mo.	2,400	31.20
Firemen	Mo.	1,800	23.40
Workmen	Day[1]	50–60	.65–.78
Pharmaceutical products factories:			
Chemists	Mo.	5,000	65.00
Foremen	Mo.	5,000	65.00
Workmen	Day[1]	20–34	.26–.44
Clothing			
Tailors:			
Workmen	Day[2]	60–100	.78–1.30
Assistants	Day[2]	40–50	.52–.65
Apprentices	Day[2]	15–30	.19½–.39
Hat factories:			
Engineers	Mo.	4,000–4,500	52.00–58.50
Oilers	Mo.	2,300	29.90
Firemen	Mo.	2,100	27.30
Workmen	Day[2]	60–90	.78–1.17
Assistants	Day[2]	25–50	.32½–.65
Knit goods factories:			
Knitters	Day[2]	30–40	.39–.52
Seamstresses	Day[2]	30–40	.39–.52
Assistants	Day[2]	18–20	.23–.26
Underwear factories:			
Superintendents	Day[2]	30–45	.39–.58½
Embroiderers	Day[2]	30–45	.39–.58½
Assistants	Day[2]	15–30	19½–.39
Foodstuffs			
Bakeries:			
Bakers	Day[3]	80–100	1.04–1.30
Dough makers	Day[3]	60–100	.78–1.30
Assistants	Day[3]	30–50	.39–.65
Chocolate and candy factories:			
Confectioners	Mo.	2,500	32.50
Engineers	Mo.	3,000	39.00
Workmen	Day[1]	60–100	.78–1.30
Women	Day[1]	20–25	.26–.32½
Foodstuffs—Contd.			
Flour mills:		*Drachmas*	
Millers	Day[1]	100	$1.30
Assistant millers	Day[1]	75	.97½
Workmen	Day[1]	88–95	1.14–1.23½
Mixers	Day[1]	100	1.30
Macaroni mills:			
Superintendents	Day[2]	80–100	1.04–1.30
Workmen	Day[2]	60–80	.78–1.04
Assistants	Day[2]	60–70	.78–.91
Women	Day[2]	30–40	.39–.52
Leather			
Leather goods factories:			
Foremen	Mo.	4,000	52.00
Workmen	Day[1]	50–100	.65–1.30
Assistants	Day[1]	25–40	.32½–.52
Women	Day[1]	20–50	.26–.65
Shoe factories:			
Cutters	Day[1]	100–330	1.30–4.29
Shoemakers	Day[1]	30–100	.39–1.30
Tanneries:			
Chemists	Mo.	3,000	39.00
Engineers	Mo.	4,000	52.00
Foremen	Mo.	3,500	45.50
Workmen	Day[1]	50–100	.65–1.30
Metal ware			
Bed factories:			
Bedmakers	Day[1]	85–150	1.10½–1.95
Nickelers	Day[1]	70–110	.91–1.43
Workmen	Day[1]	40–75	.52–.97½
Assistants	Day[1]	20–40	.26–.52
Foundries:			
Foremen	Day[1]	150	1.95
Founderers	Day[1]	80–90	1.04–1.17
Workmen	Day[1]	80–100	1.04–1.30
Assistants	Day[1]	50–70	.65–.91
Paper			
Cardboard-box factories:			
Foremen	Mo.	1,800–2,500	23.40–32.50
Workmen	Day[1]	40–50	.52–.65
Women	Day[1]	30–40	.39–.52
Wood			
Furniture factories:			
Foremen	Day[1]	100–150	1.30–1.95
Upholsterers	Day[1]	60–150	.78–1.95
Furniture makers	Day[1]	60–150	.78–1.95
Polishers	Day[1]	55–130	.71½–1.69
Assistants	Day[1]	20–40	.26–.52

[1] 8 hours.
[2] 8 hours on Saturday, 10 hours on other days.
[3] Number of hours not reported.

TABLE 1.—AVERAGE WAGES PER DAY OR PER MONTH OF WORKERS IN SPECIFIED INDUSTRIES IN GREECE, 1931—Continued

Industry and occupation	Average wages		
	Period	Amount	
		Greek currency	United States currency
Textiles			
Artificial-silk factories:		*Drachmas*	
Chemists	Mo.[2]	2,100–3,000	$27.30–39.00
Engineers	Day[2]	120	1.56
Workmen	Day[2]	65–100	.84½–1.30
Women	Day[2]	25–40	.32½–.52
Silk factories:			
Engineers	Mo.	4,500	58.50
Oilers	Day[2]	55	.71½
Cotton-spinning mills:			
Engineers	Day[2]	150	1.95
Superintendents	Day[2]	200–400	2.60–5.20
Oilers	Day[2]	75–90	.97½–1.17
Firemen	Day[2]	100	1.30
Workmen	Day[2]	65–80	.84½–1.04
Women	Day[2]	25–40	.32½–.52
Packers	Day[2]	60–80	.78–1.04
Cotton-weaving mills:			
Engineers	Mo.	3,000–5,000	39.00–65.00
Firemen and oilers	Day[2]	150	1.95
Women	Day[2]	30–35	.39–.45½
Finishers	Mo.	2,000–4,000	26.00–52.00
Dyers	Mo.	3,000–5,000	39.00–65.00
Folders	Day[2]	50–60	.65–.78
Repairers	Day[2]	35–55	.45½–.71½
Weavers	Day[2]	35–55	.45½–.71½
Washers	Day[2]	50–60	.65–.78
Hosiery factories:			
Engineers	Mo.	3,000–4,000	39.00–52.00
Ironers	Day[2]	30–35	.39–.45½
Seamstresses	Day[2]	30–50	.39–.65
Knitters	Day[2]	35–50	.45½–.65
Packers	Day[2]	30–35	.39–.45½
Workmen	Day[2]	60	.78
Rug factories:			
Dyers	Mo.	4,000–6,000	52.00–78.00
Designers	Mo.	3,000–6,000	39.00–78.00
Assistant dyers	Mo.	2,000–4,000	26.00–52.00
Copy makers	Mo.	1,000–1,500	13.00–19.50
Washers	Day[2]	40–60	.52–.78
Weaving factories:			
Engineers	Mo.	4,500	58.50
Firemen	Day[2]	50	.65
Oilers	Day[2]	50	.65
Foremen	Day[2]	55–65	.71½–.84½
Dyers	Mo.	4,500	58.50
Ironers	Day[2]	55–65	.71½–.84½
Finishers	Day[2]	45	.58½
Folders	Day[2]	25–30	.32½–.39
Repairers	Day[2]	25–30	.32½–.39
Wool-weaving mills:			
Weavers	Mo.	3,000–4,000	39.00–52.00
Weavers (women)	Day[2]	30–45	.39–.58½
Dyers	Mo.	2,500–4,000	32.50–52.00
Laborers	Day[2]	40–45	.52–.58½
Repairers	Day[2]	30–35	.39–.45½
Textiles—Contd.			
Wool-spinning mills:		*Drachmas*	
Engineers	Day[2]	150	$1.95
Oilers and firemen	Day[2]	75–100	.97½–1.30
Spinners	Day[2]	200–400	2.60–5.20
Laborers	Day[2]	65–80	.84½–1.04
Packers	Day[2]	60–80	.78–1.04
Assistants	Day[2]	25–60	.32½–.78
Flannel factories:			
Weavers	Mo.	2,500–3,500	32.50–45.50
Seamstresses	Day[2]	20–40	.26–.52
Packers	Day[2]	40–50	.52–.65
Miscellaneous			
Automobile-body builders:			
Engineers	Day[1]	80–110	1.04–1.43
Superintendents	Day[1]	100–150	1.30–1.95
Foremen	Day[1]	50–120	.65–1.56
Upholsterers	Day[1]	30–120	.39–1.56
Painters	Day[1]	50–90	.65–1.17
Workmen	Day[1]	50–80	.65–1.04
Assistants	Day[1]	20–50	.26–.65
Bookbinding:			
Foremen	Day[1]	90–100	1.17–1.30
Bookbinders	Day[1]	45–90	.58½–1.17
Assistants	Day[1]	15–25	.19½–.32½
Household utensils:			
Superintendents	Day[1]	100–120	1.30–1.56
Workmen	Day[1]	55–85	.71½–1.10½
Assistants	Day[1]	20–25	.26–.32½
Stone and marble sawing mills:			
Engineers	Mo.	2,700	35.10
Sawers	Day[1]	90–100	1.17–1.30
Workmen	Day[1]	40–60	.52–.78
Umbrella factories:			
Cutters	Mo.	2,500–3,500	32.50–45.50
Workmen	Day[2]	35–80	.45½–1.04
Women	Day[2]	25–50	.32½–.65
Mining:			
Superintendents	Day[1]	55–150	.71½–1.95
Foremen	Day[1]	65–70	.84½–.91
Miners	Day[1]	45–55	.58½–.71½
Assistant miners and transporters	Day[1]	35–45	.45½–.58½
Porters(women)	Day[1]	20–28	.26–.36
Machinists	Day[1]	120	1.56
Tobacco:			
Mixers	Day[1]	22–85	.28½–1.10½
Cutters	Day[1]	45	.58½
Cigarette makers	Day[1]	30–110	.39–1.43
Manipulators	Day[1]	22–68	.28½–.88
Women	Day[1]	22–45	.28½–.58½

[1] 8 hours.
[2] 8 hours on Saturday, 10 hours on other days.

There is a social and retirement insurance system for employees of flour mills. The funds for this purpose are obtained by assessment of 1 lepton [3] on each oke [4] of wheat milled, and by a contribution of 2 per cent of wages by both the employees and the millers.

As for the tobacco workers, there is an organization which on October 29, 1927, by legal decree was named Treasury of Insurance of Tobacco Workers (*Tamion Asfaliseos Kapnergaton*) whose purpose is the provision of insurance for members of the organization and their families covering medical and hospital assistance and drugs; disability, maternity, and death benefits; pensions; and unemployment benefits. The plan is financed by compulsory contributions of 4 per cent of wages by the tobacco workers and by the tobacco merchants, and by a Government contribution.

Macedonia and Thrace

Spinning and weaving mills.—The spinning and weaving industry is probably the most important manufacturing industry in the Province of Macedonia. Yarns and cotton, woolen and silk piece goods are produced.

The working hours per week are 58—10 hours a day the first five days, and 8 hours on Saturday. The hours observed are from 7.30 a. m. to noon, and from 1 to 6.30 p. m.

Overtime is paid for at the rate of three-quarters of a day's pay for every two hours worked.

The wages paid are as follows:

	Per day
Spinning:	
Men	[5] 30 to 45 drachmas (39 to 59 cents).
Women	[5] 17 to 30 drachmas (22 to 39 cents).
Dyers	70 drachmas (91 cents).
Weaving:	
Expert weavers, male	70 drachmas (91 cents).
Women	[5] 17 to 30 drachmas (22 to 39 cents).
Mechanics	80 drachmas (104 cents).

There is a limited amount of piece work in the weaving mills. For weaving drill cloth, 50 meters in length and 60 to 75 centimeters in width, the rate is 35 drachmas (46 cents). For weaving drill cloth, 50 meters in length and 1.40 meters in width, the rate is 75 drachmas (98 cents).

In the cities of Vodena, Naoussa, and Verria, the wages paid to women are from 2 to 5 drachmas less per day than in Saloniki.

The mill owners are not obliged under present laws to provide their employees with insurance, pensions, housing, gardens, etc., and do not do so voluntarily. No payment is made for holidays.

A stamp tax of 1 drachma on each 100 drachmas is payable on all receipts for wages. This is paid by the employers.

Mining industry.—The mining industry in the Provinces of Greek Macedonia and Thrace consists of 10 lignite mines, 5 magnesite mines, 1 iron pyrite mine, 1 zinc mine, and 1 steatite mine. A number of these mines are now closed down on account of the economic depression.

Most of the mines are open pits, and there is little underground work.

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[3] 100 leptons=1 drachma.
[4] Oke=1.35 quarts.
[5] According to length of service.

The following information is taken from a report of the Mining Inspection Bureau, dated February, 1930. More recent data is not available.

	Per day
Underground workers:	
Head men, first class	56 drachmas (73 cents).
Head men, second class	54 drachmas (70 cents).
Shorers, first class	53 drachmas (69 cents).
Shorers, second class	51 drachmas (66 cents).
Miners, first class	49 drachmas (64 cents).
Miners, second class	47 drachmas (61 cents).
Miners' helpers, first class	41 drachmas (53 cents).
Miners' helpers, second class	39 drachmas (51 cents).
Surface workers:	
Common labor	45 to 50 drachmas (59 to 65 cents).
Specialists	50 to 80 drachmas (65 to 104 cents).

The working time is eight hours per day, six days a week.

The overtime is calculated at the same rate per hour as the day rate, plus 5 per cent.

In order to attract laborers, the mine operators provide free housing and restaurants where food may be obtained at a very low cost. Frequently operators give their workers an extra day's wage per week as a bonus but this is not obligatory.

Macaroni mills.—In the paste food or macaroni mills, the minimum age limit for boys and women is 14 years. Boys between 14 and 18 years of age, and women, are permitted to work 58 hours a week, i. e., 10 hours a day for 5 days, and 8 hours on Saturdays. Men over 18 years of age may work for longer periods but must have a minimum of 9 hours' rest at night, and 2 hours' rest at noon during the summer months, and 1½ hours during the winter months. The women are primarily employed in packing.

Wages paid to men range from 40 to 100 drachmas (52 cents to $1.30) a day according to age and kind of work. Women receive from 20 to 35 drachmas (26 to 46 cents) a day.

There are no taxes on wages. No provision is made for social or other insurance, and no housing is provided.

Carpet-weaving industry.—The legal working week in the carpet-weaving industry is 6 days; 5 days of 10 hours, and 8 hours on Saturday, making a total of 58 hours per week. This schedule, however, is not strictly enforced since all the work is on a piecework basis and many of the workers have looms in their own homes and work at all hours. All the weavers are women and girls, and there is no minimum age limit for the latter. Often very old women and very young girls are employed.

The standard rate of pay is 2.80 drachmas (3.6 cents) per 1,000 knots. The earnings of the most skilled weavers do not exceed 40 drachmas (52 cents) a day, although the average daily earnings are considerably below this figure.

There are no supplementary payments.

No wage taxes are levied on the weavers.

There is no social insurance.

Soap industry.—In the soap manufacturing industry a minimum working day is not enforced, on account of the nature of the work. Laborers work 10 to 12 hours a day, 6 days a week.

Daily wages range from 60 to 80 drachmas (78 cents to $1.04).

No wage taxes are levied.

There is no social insurance.

Flour mills.—Work in the large flour mills consists of three shifts a day, each shift consisting of eight hours. Six days constitute a working week.

Wages range from 55 to 90 drachmas (72 cents to $1.17) a day.

Clothing industry.—In the clothing industry the minimum age limit is 14 years. Boys 14 to 18 years of age, and woman workers, are permitted to work 58 hours a week; 10 hours a day for 5 days and 8 hours on Saturday. Males over 18 years of age may work for longer periods but must have a minimum of 9 hours' rest at night, and 2 hours' rest at noon during the summer months, and 1½ hours' rest in the winter months.

The majority of the workers in the clothing industry are piece-workers who take work to their homes and considerable difficulty is encountered in enforcing these regulations.

Clothing workers are paid by the garment, and it is difficult to ascertain their earnings, since the rates vary with the different types of work, amount of work available, etc. It is said they average between 40 to 50 drachmas (52 and 65 cents) a day for men, and 20 to 40 drachmas (26 to 52 cents) a day for women.

No provision is made for social or other insurance.

Agriculture.—Agriculture in Macedonia and Thrace is confined to small individual farms, the average size of which does not exceed seven and one-half acres. The methods employed are still exceedingly primitive, and in the case of cereal and other food crops the output hardly suffices to meet the requirements of the farmers themselves. Flour and wheat constitute one of the most important items of import into Greece. The farms being small, however, each farmer is capable of looking after his own crops although very often they assist each other at harvest time. Recourse to outside help is seldom necessary. In prosperous periods when good prices are obtained, the tobacco growers frequently employ outside help to assist them in the picking and manipulation of the tobacco. However, not more than 10 per cent of the farmers resort to outside help at the present time.

Labor for picking is paid at 40 to 50 drachmas (52 to 65 cents) and for manipulating, 15 to 25 drachmas (20 to 33 cents), a day, including food and shelter.

The manipulation of leaf tobacco, the bulk of which is exported, is a seasonal industry. All the manipulation is done by hand and no machinery is used except hand presses for baling. The manipulation usually commences in the end of January and continues until September or October. In the Provinces of Greek Macedonia and Thrace 25,117 men and 15,875 women are employed each year in this industry.

Handlers (*stivadori*) and sorters (*denkdjis*) receive in the summer period 85 to 105 drachmas ($1.11 to $1.37) a day and woman packers (*pastaldjis*) 35 to 40 drachmas (46 to 52 cents) a day.

During the winter period, the laborers receive seven-eighths of the above rates.

Hours.—Eight hours constitute a day in the summer period and seven hours in the winter months. Six days constitute a week, making a total of 48 hours in the summer and 42 hours in the winter. No work is permitted on Sundays except in the case of the handlers who are allowed to work on Sundays during the period of fermentation of the tobacco under special permission from the Labor Inspection Bureau.

Male workers under 14 years and women under 16 years may not be employed.

In the summer time tobacco workers are permitted to work two hours overtime. The overtime rate of pay is figured on the basis of the regular wage plus 25 per cent. For instance a woman worker who receives 40 drachmas (52 cents) a day, receives 5 drachmas an hour overtime plus 25 per cent, or 6¼ drachmas for each hour of overtime. For a 10-hour day she receives 52½ drachmas (68 cents). Because of the lack of sunlight, there is no overtime work in the winter months.

No supplementary payments in kind, paid holidays, free housing, or land for gardens, are made to the tobacco workers.

There are no wage taxes.

These workers are insured under the system described on page 681.

Patras

According to official figures furnished by the local Bureau of Labor of the Ministry of National Economy the total number of workers in industries and occupations at Patras, is from 5,000 to 5,500 divided as follows:

Male workers in industries	1,500–2,000
Woman workers in industries	2,000
Male workers, nonunion	1,000
Woman workers, nonunion	500

About one-half of these workers belong to unions or brotherhoods. There are not more than 50 communist workmen in Patras.

There is no permanent unemployment in Patras, as nearly all the laborers without steady employment earn one or more days' wages each week.

The following table shows the principal classes of workers by industry and occupation with the wage rates per day and full-time hours of labor:

Table 2.—DAILY WAGES AND HOURS OF WORK IN SPECIFIED OCCUPATIONS IN PATRAS, GREECE, NOVEMBER, 1931

[Conversions into United States currency on basis of drachma=1.3 cents]

Sex and occupation	Hours per day	Wages per day	
		Greek currency	United States currency
Males:		*Drachmas*	
Currant packers	9	125–135	$1.63–$1.76
Spinners	10	50– 80	.65– 1.04
Distillery workers	8	60– 75	.78– .98
Carpenters, factories	9	80–110	1.04– 1.43
Tanners	8	45– 65	.59– .85
Flour-mill workers	8	50– 75	.65– .98
Macaroni factory workers	9	60– 80	.78– 1.04
Bakery workers	9	60– 70	.78– .91
Tobacco workers	8	75–100	.98– 1.30
Furniture workers	8	80–100	1.04– 1.30
Printers	8	80–100	1.04– 1.30
Stevedores	8	150	1.95
Carpenters, masons, and similar workers	8	90–125	1.17– 1.63
Teamsters	8	125–150	1.63– 1.95
Females:			
Skilled laborers, factories	8–10	40– 50	.52– .65
Apprentices	8–10	20– 30	.26– .39
Nonunion laborers	8–10	30– 40	.39– .52
Children, aged—			
14–16 years	8–10	20– 35	.26– .46
16–18 years	8–10	25– 45	.33– .59

Tailors and shoemakers are paid by the piece, the former being paid at the rate of 300 drachmas ($3.90) per suit and 200 drachmas ($2.60) per overcoat. Shoemakers are paid from 60 to 80 drachmas ($0.78 to $1.04) for each pair of shoes for adults and from 35 to 50 drachmas (46 to 65 cents) for each pair of children's shoes.

Twenty-five per cent extra is generally paid for all overtime work. Double time is paid for work on holidays.

No supplementary payments are made for family allowance. No payments in kind are made, and free housing and garden is given in a few instances only.

Deductions from the above wages are made in the form of a special tax only from the laborers who receive a daily wage rate of 60 drachmas (78 cents) or over.

Social insurance has not yet been extended to all classes of laborers. Only a few classes of workers pay from 2 to 6 per cent of their daily wages as social insurance.

General Survey of Wages in Switzerland, 1930 and 1931 [1]

WHILE manufacturing has come to be of great economic importance in Switzerland, agriculture and its branches occupy more than a third of the Swiss wage earners. The strictly local industries, such as building, printing, transportation and the hotel and restaurant trade account for a great many more, but strictly factory workers may be reckoned to number another third of the working population.

Some of the industrial groups which are important in the United States are not represented in Switzerland, as for instance coal mining and oil production; in fact, mineral mining in general is unimportant. Logging and lumbering accounts for the employment of considerable numbers of mountain peasants during winter months, but hardly exists as a year-round industry.

The most important branches of manufacture are textiles, followed by machine building, clock and watch manufacture, metal working, and the preparation of foodstuffs. Of these groups, the textile and clock and watch industries have been undergoing such a difficult period during the past few years that their relative position in Swiss industry is less important to-day than before the war. The machine-building trade, however, has been fairly successful right up to the present time, as has the food industry, among which latter the cheese, chocolate, and condensed milk branches lead.

Number of persons employed.—Following is a short table showing the number of factory workers in Switzerland according to industry, in 1901, 1911, and 1930.

Payments supplementary to wages.—There are, as a rule, no supplementary payments in industry, such as family allowances, payments in kind, or free housing or land for gardens. In some cases dwelling accommodations are provided by factory owners, but a fair rent is always charged for them. In the rural districts some instances exist of free garden land being granted to employees if the factory has available terrain which could not be more profitably used otherwise, but these cases are infrequent.

[1] This report was prepared by Gibson G. Blake, American consul, Geneva; Hugh F. Ramsay, American vice consul, Zurich; J. Tuck Sherman, American vice consul, Berne; Albert W. Scott, American vice consul, Basel; and Frederick W. Baldwin, American consul, Lausanne.

TABLE 1.—NUMBER OF FACTORY WORKERS IN SPECIFIED INDUSTRIES IN SWITZERLAND, 1901, 1911, AND 1930

Industry	Number of factory workers in specified industries in—		
	1901	1911	1930
Cotton textiles	32,297	29,550	32,567
Silk and artificial silk	33,908	32,024	28,533
Woolen textiles	4,166	5,325	7,953
Linen textiles	1,043	1,007	1,949
Embroideries	16,751	28,606	6,431
Other textile branches	3,153	4,509	7,550
Clothing and objects of equipment	14,671	23,443	41,015
Food products	18,332	26,044	26,564
Chemical industry	4,196	7,394	11,862
Municipal services	2,156	4,228	4,242
Paper, leather, and rubber	7,316	9,262	13,981
Woodworking	14,381	23,765	25,421
Printing and binding	7,469	10,042	14,285
Production and working of metals	13,043	23,325	35,468
Machine and instrument building	32,626	47,630	76,803
Clocks and watches	24,858	34,983	41,784
Earthenware and stoneworking	12,168	17,704	15,416

Paid vacations and certain holidays are the rule for all workers who work on a weekly or monthly basis, and in a few instances certain more or less local half holidays are granted with pay to workers on a daily wage basis.

In most of the collective agreements regarding wages, the granting of paid vacations and paid holidays are considered, and definite arrangements made for either granting or refusing them.

The period of compulsory military service is 9½ weeks for infantry in the first year of service, about 14 weeks for cavalry and artillery in the first year, and 2 weeks a year for the following 8 years for all arms, and short periods in the 7 succeeding years. There is no law obliging employers to pay wages for these periods or even to give employment to men who leave their service for military service. However, many of the collective wage agreements cover these questions.

There are unemployment and sick benefit insurance funds in operation in practically all of the Cantons of Switzerland. Most of these enjoy Federal subsidy, all of them cantonal subsidy, and all of them require contributions from the insured workers. These contributions in the case of unemployment insurance are not large but vary in each Canton.

Collective agreements.—The majority of the collective agreements relate to the payment of wages or salaries, a smaller number taking up such questions as hours of labor, paid holidays and vacations, overtime and the prohibition of piecework. Most of the labor agreements which deal with the wage question set up a minimum wage, but it must be realized that in a small, highly developed country such as Switzerland, minimum wage agreements are relatively unimportant to skilled workers, who in normal times are able to demand, and to receive, more than the minimum rates. Piece rates are not common and are most often encountered in the clock and watch industry, although the tendency is away from this system. The actual piece rates in this industry are not published, and are the subject of special agreement in nearly every factory.

Average Wages in Specified Industries

THE table which follows shows the average wages per day and per hour, as computed by insurance funds against accidents, of workmen injured in industrial accidents:

TABLE 2.—AVERAGE DAILY AND HOURLY EARNINGS OF WORKERS INJURED IN INDUSTRIAL ACCIDENTS IN SWITZERLAND IN 1930

Earnings per day

[Conversions into United States currency on basis of franc=19.3 cents]

Industry	Men						Women, aged 18 and more		Young persons under 18 years of age	
	Foremen		Skilled and semiskilled		Unskilled					
	Swiss currency	U. S. currency	Swiss currency	U. S. currency	Swiss currency	U. S. currency	Swiss currency	U. S. currency	Swiss currency	U. S. currency
	Francs		*Francs*		*Francs*		*Francs*		*Francs*	
Metal and machine	17.16	$3.31	12.13	$2.34	9.55	$1.84	6.46	$1.25	4.90	$0.95
Building	15.93	3.07	13.23	2.55	10.28	1.98	------	------	7.86	1.52
Wood	15.65	3.02	11.81	2.28	8.89	1.72	5.98	1.15	5.19	1.00
Textiles	14.69	2.84	10.52	2.03	9.22	1.78	6.44	1.24	4.50	.87
Watch and clock	------	------	12.14	2.34	8.47	1.63	7.01	1.35	4.97	.96
Stone and earth	15.64	3.02	12.40	2.39	9.42	1.82	5.26	1.02	5.39	1.04
Shoe	------	------	10.97	2.12	9.13	1.76	6.99	1.35	4.70	.91
Paper	------	------	11.70	2.26	8.89	1.72	5.81	1.12	4.11	.79
Printing	------	------	15.88	3.06	9.59	1.85	6.51	1.26	4.09	.79
Chemical	16.90	3.26	12.40	2.39	10.33	1.99	6.05	1.17	5.09	.98
Food, drink, and tobacco	18.10	3.49	13.99	2.70	11.54	2.23	5.67	1.09	4.68	.90
Transportation	------	------	11.35	2.19	10.53	2.03	------	------	------	------
Electric light and power	18.18	3.51	14.55	2.81	10.84	2.09	------	------	------	------
Warehousing and commerce	16.10	3.11	13.51	2.61	10.93	2.11	6.67	1.29	5.02	.97
Gas and water works	------	------	15.86	3.06	13.45	2.60	------	------	------	------
Mines and quarries	14.15	2.73	12.40	2.39	9.48	1.83	------	------	7.01	1.35
Forestry	------	------	9.68	1.87	8.61	1.66	------	------	6.70	1.29
All industries	16.22	3.13	12.57	2.43	9.90	1.91	6.36	1.23	5.45	1.05

Earnings per hour

	Francs		*Francs*		*Francs*		*Francs*		*Francs*	
Metal and machine	1.82	$0.35	1.50	$0.29	1.18	$0.23	0.80	$0.15	0.60	$0.12
Building	1.71	.33	1.54	.30	1.17	.23	------	------	.89	.17
Wood	1.63	.31	1.41	.27	1.04	.20	.73	.14	.63	.12
Textiles	1.39	.27	1.23	.24	1.09	.21	.77	.15	.65	.13
Watch and clock	------	------	1.48	.29	1.01	.19	.86	.17	.60	.12
Stone and earth	------	------	1.47	.28	1.12	.22	.68	.13	.90	.17
Shoe	------	------	1.28	.25	1.08	.21	.82	.16	.55	.11
Paper	------	------	1.38	.27	1.10	.21	.67	.13	.52	.10
Printing	------	------	2.00	.39	1.16	.22	.78	.15	.50	.10
Chemical	------	------	1.46	.28	1.23	.24	.74	.14	.63	.12
Food, drink, and tobacco	------	------	1.61	.31	1.45	.28	.68	.13	.58	.11
Transportation	------	------	1.44	.28	1.21	.23	------	------	------	------
Warehousing and commerce	------	------	1.60	.31	1.27	.25	.78	.15	------	------
Electric light and power	------	------	1.54	.30	1.10	.21	------	------	------	------
Gas and water works	------	------	1.70	.33	1.38	.27	------	------	------	------
Mines and quarries	------	------	1.38	.27	1.03	.20	------	------	.73	.14
Forestry	------	------	1.02	.20	.99	.19	------	------	------	------
All industries	1.67	.32	1.49	.29	1.16	.22	.76	.15	.68	.13

Metal and machine industries.—Wage rates in the metal and machine industries, published in the 25th annual report of the Employers' Association of Swiss Machine and Metal Industrialists for the year 1930, are as follows:

TABLE 3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF WORKERS IN METAL AND MACHINE INDUSTRIES IN SWITZERLAND IN 1930

[Conversions into United States currency on basis of franc=19.3 cents]

Occupation	Average earnings			
	Per hour		Per week	
	Swiss currency	United States currency	Swiss currency	United States currency
	Francs		*Francs*	
Skilled workers	1.59	$0.31	76.18	$14.70
Helpers	1.26	.24	60.34	11.65
Average, all workers	1.44	.28	69.07	13.33

The average hourly wages in the silk dying and throwing industry located in the Canton of Zurich are shown below:

	Per hour
Dyers, male	1.81 francs (34.9 cents).
Dyers, helpers, male	1.43 francs (27.6 cents).
Skilled workers, female	0.95 franc (18.3 cents).
Unskilled workers, female	0.82 franc (15.8 cents).

Wages in the Basel District

THERE are several important manufacturing industries in the Basel consular district, and agriculture is carried on to some extent. The principal products of the manufacturing industries in this district are: Aniline dyes, chemicals, pharmaceutical products, watches, silk ribbons, spun silk, shoes, magnetos, automatic time switches, and machinery.

In all instances, wages given are those in effect at the present time, the figures being furnished by persons connected with Basel industries. No published material concerning wages paid in local industries has been found available, and little information on the subject could be obtained from official sources.

Mechanical industries.—In the Basel district, skilled mechanics employed in factories making electrical and other kinds of machinery earn, on the average, 1.70 francs (33 cents) an hour. The 48-hour week is established in nearly all factories throughout Switzerland.

Foremen in machine shops receive an average of approximately 2 francs (39 cents) an hour. Apprentices, usually youths who begin their apprenticeship at 14 or 15 years of age and are apprenticed for 3½ or 4 years, receive 0.12 franc (2 cents) an hour in the first year, 0.18 franc (3.5 cents) an hour in the second year, 0.24 franc (4.6 cents) an hour in the third year, and 0.30 franc (5.8 cents) an hour in the fourth year.

Agriculture.—Men employed as skilled farm workers in this district receive 80 to 100 francs ($15.44 to $19.30) a month, and also their board and lodging, considered as worth approximately 150 francs ($28.95) a month. Less skilled workers, including youths and women, receive varying rates of pay less than 80 francs a month, depending upon their qualifications.

Chemical industry.—In the chemical industry, men with some training and experience receive an average wage of 1.40 to 1.50 francs

(27 to 29 cents) an hour, "full time" being 48 hours a week. Foremen and specially skilled workers receive as much as 2 francs (39 cents) an hour. Women and girls employed as packers earn between 0.80 and 0.90 franc (15 and 17 cents) an hour.

Spun-silk industry.—Most of the workers in the Basel spun-silk industry are women and girls. The usual wage earned by skilled workers is 8 francs ($1.54) a day, on the basis of five and one-half working-days to the week. The less skilled woman employees receive from 6 to 7 francs ($1.16 to $1.35) a day. Men employed as mechanics to repair looms earn 10 to 12 francs ($1.93 to $2.32) a day.

Ribbon industry.—Wages paid in the Basel ribbon factories are practically the same as those given for the spun-silk industry. The manufacture of ribbons in this district was formerly of considerable importance but has greatly decreased in the last few years. When the industry was more important, a large part of the work was carried on in the homes of the workers. Looms were supplied by the employers and payment was on a piece-rate basis. There is little production by the home workers at the present time.

Watch industry.—Men employed as skilled workers in watch factories located in the Basel district earn from 1.50 to 2 francs (29 to 39 cents) an hour. Unskilled men receive 1.20 francs (23 cents) an hour. Apprentices are paid 0.40 franc (8 cents) an hour.

Women employed as skilled workers are paid from 1.30 to 1.40 francs (25 to 27 cents) an hour, while unskilled woman workers receive 0.80 franc (15 cents) an hour.

Shoe industry.—Workers in the shoe industry are divided into a number of classes according to the particular kind of work performed, but the general division between skilled and unskilled workers and apprentices may be made. Skilled men are paid on the average 1.50 francs (29 cents) an hour. Unskilled men earn about 1 franc (19 cents) an hour, while apprentices receive from 0.50 to 0.70 franc (10 to 14 cents) an hour.

Skilled woman workers receive 0.90 francs (17 cents) an hour, while women and girls employed as apprentices or unskilled workers are paid 0.50 to 0.60 franc (10 to 12 cents).

Payment for Overtime Work

In Switzerland factory owners desiring to use their employees on overtime work must obtain special permission from the authorities and are required to pay a higher rate for overtime work than is paid for work during the usual hours.

Payments Supplementary to Wages

While few workers in the Basel district receive supplementary payments in the nature of family allowances, payments in kind, free housing, or land for gardening, nearly all workers receive an annual vacation with pay. The duration of the vacation granted varies considerably in the different industries, but as a rule from 7 to 14 days are given. Usually the number of days of vacation that may be granted depends upon the length of service.

Deductions from Wages

Employers in this part of Switzerland make no deductions from wages in the nature of special wage taxes. Nearly all workers, however, are subject to income tax as levied by the cantonal governments. In the Canton of Basel-City, persons without dependents are subject to income tax if their annual income is 2,000 francs ($386) or more. The personal exemption for persons having dependent relatives to support is 3,500 francs ($675.50).

Factory and other workers are required to be insured against unemployment either with the unemployment insurance office of the Canton or with a private insurance organization that is officially recognized and controlled. In the Canton of Basel-City persons insured with the cantonal institution are classified into five daily wage classes, the contribution per month for each of these five classes being as follows:

	Monthly contribution
Up to 6 francs ($1.16)	0.70 franc (13.5 cents).
6.01 to 9 francs ($1.16 to $1.74)	1.00 franc (19.3 cents).
9.01 to 12 francs ($1.74 to $2.32)	1.50 francs (29.0 cents).
12.01 to 14 francs ($2.32 to $2.70)	2.00 francs (38.6 cents).
Over 14 francs ($2.70)	2.50 francs (48.3 cents).

Some of the private unemployment insurance organizations are conducted by employers in cooperation with employees and in such instances the employers share in the payment of contributions. Some employers pay the entire amount. All employers in the Canton of Basel-City are required to contribute to a so-called "crisis fund" of the cantonal unemployment insurance office, the amount of contribution being two-tenths of 1 per cent of the amount of wages paid out to their employees. This fund is not used unless the cantonal subsidy, public and private, exceeds five times the contribution of the employers.

In addition to premiums paid for unemployment insurance, many employers in this district pay premiums to insure their workers against accident and illness, and in some cases make provision for pension funds. It is understood that the total amount paid out in this way for social insurance contribution often amounts to as much as 1.50 francs (29 cents) a day for each worker, this amount being in addition, of course, to wages.

Wages in Agriculture

In 1888 the Swiss census showed 1,092,827 persons engaged in agriculture. Each successive census since that time has shown a decrease, there being in 1920 only 971,696 persons so engaged. During the same period the number of agricultural workers employed decreased from 126,020 to 96,575. These figures are part of a study of conditions in agriculture in Switzerland made in 1929–30 by the secretariat of the Swiss Farmers' Union. According to the report, the number of workers in agriculture has shown a still further decrease since 1920, so marked a decrease that one of the purposes of the study was to ascertain to what conditions the exodus of workers has been due and what could be done to remedy the situation.

The study covered all of the Cantons of Switzerland. Inquiries were addressed to 3,019 communes and replies were received from

2,335, or 77.3 per cent. Among the subjects covered were the questions of money wages, payments in kind, working hours, and general farm costs.

Table 4 shows the rates paid in specified occupations in 1930 and gives comparative figures for the period before the World War and in 1921, taken from previous studies by the secretariat:

TABLE 4.—WAGE RATES PAID FOR SPECIFIED AGRICULTURAL OCCUPATIONS IN SWITZERLAND

[Conversions into United States currency on basis of franc=19.3 cents]

Occupation	Average wage rates					
	Pre-war		1921		1930	
	Francs	United States currency	Francs	United States currency	Francs	United States currency
	Per week					
Head men	15.80	$3.05	29.65	$5.72	[1] 27.55 [2] 32.90	[1] $5.32 [2] 6.35
Cowherds	13.90	2.68	25.90	5.00	[1] 23.80 [2] 28.40	[1] 4.59 [2] 5.48
Carters	13.30	2.57	24.90	4.81	23.10	4.46
Field hands	10.90	2.10	21.20	4.09	19.55	3.77
Domestic and farm servants	6.85	1.32	13.00	2.51	13.70	2.64
	Per day					
Day laborers:						
Males—						
Summer rate			11.30	$2.18	9.60	$1.85
Winter			8.20	1.58	6.85	1.32
Females—						
Summer rate			5.90	1.14	5.75	1.11
Winter rate			4.45	.86	4.05	.78
Day laborers receiving board and lodging:						
Males—						
Summer rate			7.25	1.40	6.30	1.22
Winter rate			4.80	.93	4.15	.80
Females—						
Summer rate			3.90	.75	3.90	.75
Winter rate			2.85	.55	2.70	.52

[1] Single men. [2] Married men.

In addition to money wages, it is the custom in some places to furnish certain payments in kind. In the case of married workers these usually include housing accommodations, use of work animals, and the use of land for gardening. In the case of unmarried workers, clothing is sometimes furnished, or their laundry work done, etc. In the 937 cases in which data were obtained, the average annual value of such additional payments was 57 francs ($11) per capita in the case of unmarried workers, and 95 francs ($18) in the case of married workers.

The following table shows the average annual wages of different classes of farm workers and the value of board and lodging and of different payments in kind.

TABLE 5.—AVERAGE ANNUAL WAGES OF SWISS AGRICULTURAL WORKERS, AND VALUE OF PAYMENTS IN KIND, IN 1930

[Conversions into United States currency on basis of franc=19.3 cents]

Item	Average annual remuneration of—									
	Married master farmer [1]		Single milker		Teamster		Laborer		Maid servant	
	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency
	Francs		*Francs*		*Francs*		*Francs*		*Francs*	
Cash wage	1,720	$331.96	1,250	$241.25	1,200	$231.60	920	$177.56	710	$137.03
Food	1,000	193.00	1,000	193.00	1,000	193.00	1,000	193.00	800	154.40
Other payments in kind	100	19.30	60	11.58	60	11.58	60	11.58	60	11.58
Lodging	360	69.48	100	19.30	100	19.30	100	19.30	100	19.30
Total	3,180	613.74	2,410	465.13	2,360	455.48	2,080	401.44	1,670	322.31

[1] Does not include remuneration for his wife's services.

Unmarried foremen may receive a cash wage 8 to 12 francs less per week than married foremen, the average decrease working out at 5.25 francs. Unmarried stockmen receive on an average 4.60 francs less per week in cash than married stockmen. It may be remarked that those described as ordinary laborers are usually young men who later in life are ranked as waggoners, stockmen, etc.

Table 6 shows the average number of working hours per day in the various seasons of the year in 1930 as compared with 1909. As is seen, a slight increase has taken place.

TABLE 6.—AVERAGE LENGTH OF WORKING-DAY IN AGRICULTURE IN SWITZERLAND, 1909 AND 1930

Season	Average working hours per day							
	Stable employees				Other male employees			
	1909		1930		1909		1930	
	Hrs.	*Min.*	*Hrs.*	*Min.*	*Hrs.*	*Min.*	*Hrs.*	*Min.*
Spring	12	10	12	25	11	20	11	25
Hay harvest	13	30	13	45	13	30	13	30
Summer	13	10	13	10	12	25	12	45
Autumn	12	10	12	10	11	20	11	20
Winter	11	10	11	10	9	40	10	00
Yearly average	12	10	12	15	11	15	11	25

An average of 2.10 hours is allowed for meal times so that the shortest day from home which a stockman, etc., can hope for even in winter is nearly 13½ hours, while his longest day is practically 16 hours; the shortest day for any worker at any season exceeds 12 hours. In addition, there is Sunday work. This is sometimes, but by no means always, and usually only in the vicinity of towns, compensated by extra remuneration, rather uncertain in amount, being anything between 80 centimes (15 cents) and 1.20 francs (23 cents) per hour, or even only a sort of tip.

Vacations.—In the course of the year 10.8 free days on an average are allowed to those engaged in the care of animals and 24 days to others; the number of days allowed varies a good deal in the different Cantons, as does in general the amount of Sunday work required.

TREND OF EMPLOYMENT

Summary for January, 1932

EMPLOYMENT decreased 3.9 per cent in January, 1932, as compared with December, 1931, and total pay rolls decreased 7.5 per cent.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the total pay rolls for one week, for both December, 1931, and January, 1932, together with the per cents of change in January, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND TOTAL PAY ROLLS, DECEMBER, 1931, AND JANUARY, 1932

Industrial group	Establishments	Employment		Per cent of change	Pay roll in 1 week		Per cent of change
		December, 1931	January, 1932		December, 1931	January, 1932	
1. Manufacturing	**16,197**	**2,788,626**	**2,716,535**	[1] **−2.8**	**$57,775,112**	**$54,022,362**	[1] **−6.9**
2. Coal mining	**1,359**	**297,841**	**291,970**	**−2.0**	**6,263,328**	**5,268,642**	**−15.9**
Anthracite	160	109,138	104,183	−4.5	3,114,085	2,441,555	−21.6
Bituminous	1,199	188,703	187,787	−0.5	3,149,243	2,827,087	−10.2
3. Metalliferous mining	**239**	**29,586**	**28,465**	**−3.8**	**613,150**	**531,045**	**−13.4**
4. Quarrying and nonmetallic mining	**618**	**22,158**	**20,088**	**−9.3**	**408,000**	**334,354**	**−18.1**
5. Crude petroleum producing	**236**	**20,659**	**19,509**	**−5.6**	**751,193**	**635,767**	**−15.4**
6. Public utilities	**12,059**	**661,261**	**657,597**	**−0.6**	**20,459,614**	**19,699,312**	**−3.7**
Telephone and telegraph	8,178	294,116	293,708	−0.1	8,856,828	8,515,984	−3.8
Power, light, and water	3,383	233,119	230,528	−1.1	7,416,966	7,186,307	−3.1
Electric railroad operation and maintenance, exclusive of car shops	498	134,026	133,361	−0.5	4,185,820	3,997,021	−4.5
7. Trade	**14,390**	**488,674**	**400,489**	**−18.0**	**11,056,830**	**9,414,246**	**−14.9**
Wholesale	2,457	67,692	66,213	−2.2	2,011,045	1,916,984	−4.7
Retail	11,933	420,982	334,276	−20.6	9,045,785	7,497,262	−17.1
8. Hotels	**2,262**	**140,675**	**140,772**	**+0.1**	[2] **2,202,488**	[2] **2,157,811**	**−2.0**
9. Canning and preserving	**783**	**26,531**	**22,792**	**−14.1**	**421,119**	**362,503**	**−13.9**
10. Laundries	**813**	**55,295**	**54,882**	**−0.7**	**968,895**	**955,826**	**−1.3**
11. Dyeing and cleaning	**295**	**9,726**	**9,404**	**−3.3**	**198,201**	**192,024**	**−3.1**
Total	**49,251**	**4,541,032**	**4,362,503**	**−3.9**	**101,117,930**	**93,573,892**	**−7.5**

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION [3]							
New England	7,174	500,075	480,714	−3.9	$10,944,573	$10,364,755	−5.3
Middle Atlantic	8,727	1,379,535	1,311,866	−4.9	32,828,654	29,865,254	−9.0
East North Central	10,332	1,196,711	1,168,826	−2.3	27,490,754	25,778,203	−6.2
West North Central	5,108	285,840	274,620	−3.9	6,533,513	6,105,566	−6.6
South Atlantic	5,242	493,366	484,588	−1.8	8,546,227	8,082,126	−5.4
East South Central	2,493	185,643	178,098	−4.1	2,854,579	2,629,322	−7.9
West South Central	2,933	154,831	146,779	−5.2	3,475,228	3,150,702	−9.3
Mountain	1,826	84,361	75,707	−10.3	2,030,475	1,746,775	−14.0
Pacific	5,416	260,670	241,305	−7.4	6,413,927	5,851,189	−8.8
All divisions	**49,251**	**4,541,032**	**4,362,503**	**−3.9**	**101,117,930**	**93,573,892**	**−7.5**

[1] Weighted per cent of change for the combined 89 manufacturing industries, repeated from Table 1, manufacturing industries; the remaining per cents of change, including total, are unweighted.

[2] The amount of pay roll given represents cash payments only; the additional value of board, room, and tips can not be computed.

[3] *New England:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. *Middle Atlantic:* New Jersey, New York, Pennsylvania. *East North Central:* Illinois, Indiana, Michigan, Ohio, Wisconsin. *West North Central:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. *South Atlantic:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. *East South Central:* Alabama, Kentucky, Mississippi, Tennessee. *West South Central:* Arkansas, Louisiana, Oklahoma, Texas. *Mountain:* Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming. *Pacific:* California, Oregon, Washington.

All of these industrial groups, with the exception of hotels, reported decreases, over the month interval, in both employment and earnings. As regards number of persons employed, the decreases ranged from 0.1 per cent in the telephone and telegraph group to 20.6 per cent in the retail trade group. As regards total pay roll, the decreases ranged from 1.3 per cent in laundries to 21.6 per cent in anthracite mining. The hotel group reported an increase in employment of 0.1 per cent and a decrease in earnings of 2 per cent.

All the geographic divisions reported decreases in employment in January, 1932, as compared with December, 1931, coupled with larger decreases in total pay roll. The South Atlantic group showed the smallest change in numbers employed, 1.8 per cent, while the New England States had the smallest decrease in pay rolls, 5.3 per cent. The Mountain division reported the largest decreases in both items, namely, 10.3 per cent in employment and 14 per cent in earnings.

PER CAPITA WEEKLY EARNINGS IN JANUARY, 1932, AND COMPARISON WITH DECEMBER, 1931, AND JANUARY, 1931

Industrial group	Per capita weekly earnings in January, 1932	Per cent of change, January, 1932, compared with—	
		December, 1931	January, 1931
1. Manufacturing (89 industries)	$19.89	−4.2	−12.2
2. Coal mining:			
Anthracite	23.44	−17.9	−18.3
Bituminous	15.05	−9.6	−25.5
3. Metalliferous mining	18.66	−10.0	−25.1
4. Quarrying and nonmetallic mining	16.64	−9.8	−21.1
5. Crude petroleum producing	32.59	−10.3	−11.5
6. Public utilities:			
Telephone and telegraph	28.99	−3.8	+0.9
Power, light, and water	31.17	−2.0	−0.4
Electric railroads	29.97	−4.0	−5.1
7. Trade:			
Wholesale	28.95	−2.6	−7.4
Retail	22.43	+4.5	−6.7
8. Hotels (cash payments only) [1]	15.33	−2.1	−8.4
9. Canning and preserving	15.90	(2)	−3.8
10. Laundries	17.42	−0.5	−5.8
11. Dyeing and cleaning	20.42	+0.2	−8.0
Total	21.45	−3.7	−9.6

[1] The additional value of board, room, and tips can not be computed.
[2] No change.

Per capita earnings for January, 1932, given in the preceding table, must not be confused with full-time weekly rates of wages; they are actual per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers). Comparisons are made with per capita earnings in December, 1931, and in January, 1931.

Data are not yet available showing railroad employment for January, 1932. Reports of the Interstate Commerce Commission for Class I railroads show that the number of employees (exclusive of executives and officials) decreased from 1,154,540 on November 15, 1931, to 1,119,396 on December 15, 1931, or 3.0 per cent; the amount of pay roll decreased from $148,646,952 in November to $147,562,367 in December, or 0.7 per cent.

Employment in Selected Manufacturing Industries in January, 1932

Comparison of Employment and Pay Rolls in January, 1932, with December, 1931, and January, 1931

EMPLOYMENT in manufacturing industries decreased 2.8 per cent, while earnings fell 6.9 per cent in January, 1932, as compared with December, 1931. During the year ending with January, 1932, the number of persons employed decreased 13.1 per cent, while the total pay roll decreased 23.7 per cent.

The per cents of change in employment and earnings in January, 1932, as compared with December, 1931, are based on returns made by 16,197 establishments in 89 of the principal manufacturing industries in the United States, having in January 2,716,535 employees whose earnings in one week were $54,022,362.

Recently the bureau has obtained for the year 1926 data as to employment and pay rolls from 31 industries heretofore not included in the index numbers. Six industries which have heretofore been included with other industries are now presented separately. Two small industries have been discontinued. The 1931 index numbers have been recomputed for all manufacturing and for the industry groups affected by the changes.

This revision shows an average index number for employment of 72.2 for the year 1931 as compared with the old index number, 70.9. This difference in the index is due to the fact that there has been, since 1926, less shrinkage in the industries just added than in those previously covered. The old and new general index numbers for 1931 are shown in Table 3.

The index of employment in January, 1932, is 64.8 as compared with 66.7 in December, 1931, 67.1 in November, 1931, and 74.6 in January, 1931. The index of the total pay roll for January, 1932, is 48.6, as compared with 52.2 for December, 1931, 52.5 for November, 1931, and 63.7 for January, 1931. The 12-month average for 1926 equals 100.

Of the 14 groups of manufacturing industries upon which the bureau's indexes of employment and pay roll are based, the leather group reported increases in both employment and earnings over the month interval—3.5 and 6 per cent, respectively. The transportation equipment group showed a gain of 3.1 per cent in employment and a loss of 1.7 per cent in earnings. The remaining 12 groups reported losses in both items, the largest decreases in employment occurring in the stone, food, railroad repair shop, and lumber groups. In January, 1932, as compared with January, 1931, the transportation equipment group showed a loss of 10.7 per cent in employment and a gain of 5.9 per cent in earnings, while the remaining 13 groups showed losses in both employment and earnings.

Increases in employment from December to January were shown in 18 of the 89 separate manufacturing industries covered, while increased pay rolls were reported in 9 industries. The most pronounced increase in employment was shown in the millinery industry, but the fertilizer, automobile, and agricultural-implement industries also showed substantial gains. Seventy industries reported losses in both

employment and earnings, and one industry, men's clothing, showed a loss in employment coupled with an increase in pay roll.

A comparison of January, 1932, with January of the previous year shows that five industries—millinery, corsets, hosiery, rayon, and wirework—gained in numbers employed. One industry, automobiles, showed an increase in earnings. The remaining 83 industries showed decreases in both items.

In January, 1932, as compared with December, 1931, decreases in both number of employees and total pay rolls were reported by all the geographic divisions. These ranged from 0.7 per cent in employment in the East North Central States to 23.5 per cent in the Mountain division. Pay rolls in the New England division suffered a falling off over the month interval of only 4.7 per cent, while the Mountain States had a loss of 26.4 per cent. The decreases in the Mountain States are due largely to a seasonal decline in the beet-sugar industry.

All the geographic divisions also had losses in both items in January, 1932, as compared with January, 1931. The South Atlantic States showed the smallest drop in employment and in pay rolls over the year interval—namely, 2.9 per cent and 15.7 per cent, respectively. The Mountain division registered the greatest falling off over the same period—36.0 per cent in employment and 36.9 per cent in pay rolls.

In Table 1, which follows, are shown the number of identical establishments reporting in both December, 1931, and January, 1932, in the 89 manufacturing industries, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest January 15 and the amount of their weekly earnings in January, the per cents of change over the month and the year intervals, and the index numbers of employment and total pay rolls in January, 1932.

The monthly per cents of change in employment and earnings for each of the 89 separate industries are computed by direct comparison of the total number of employees for the former and of the amount of weekly earnings for the latter in identical establishments for the two months considered. The per cents of change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The per cents of change over the year interval in the separate industries in the groups and in the totals are computed from the index numbers of employment and total pay rolls.

TABLE 1.—COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLLS IN IDENTICAL **MANUFACTURING** ESTABLISHMENTS IN DECEMBER 1931, AND JANUARY, 1932, PER CENTS OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY ROLLS, JANUARY, 1932

Industry	Establishments reporting in both mos.	Employment			Total pay rolls			Index numbers January, 1932 (average, 1926=100)	
		Number on pay rolls, January, 1932	Per cent of change		Amount of pay rolls (1 week) January, 1932	Per cent of change			
			December, 1931, to January, 1932	January, 1931, to January, 1932		December, 1931, to January, 1932	January, 1931, to January, 1932	Employment	Total pay rolls
Food and kindred products	**2,596**	**230,968**	**−6.8**	**−8.2**	**$5,372,942**	**−7.2**	**−16.6**	**83.1**	**75.2**
Slaughtering and meat packing	204	86,859	−1.9	−5.3	2,027,416	−4.8	−18.4	91.5	83.0
Confectionery	323	31,858	−15.1	−8.9	535,240	−16.2	−18.4	75.7	66.2
Ice cream	302	10,472	−0.6	−8.2	321,175	−1.6	−15.0	68.2	62.8
Flour	392	15,257	−0.7	−5.9	346,103	−2.3	−16.1	85.1	73.6
Baking	834	59,918	−2.8	−6.9	1,475,418	−3.2	−13.2	84.3	77.8
Sugar refining, cane	14	7,854	−1.0	−2.7	199,619	−3.5	−14.0	79.2	68.2
Beet sugar	46	4,045	−71.7	−63.1	88,667	−68.7	−55.6	51.0	42.4
Beverages	281	9,708	−2.6	−8.0	257,586	−4.6	−16.9	73.3	61.6
Butter	200	4,997	−6.9	−6.2	121,718	−8.9	−14.1	91.5	82.7
Textiles and their products	**2,756**	**544,236**	**−1.2**	**−5.0**	**8,222,472**	**−3.6**	**−17.2**	**72.2**	**54.0**
Cotton goods	533	180,458	−1.3	−0.4	2,173,509	−2.6	−15.3	72.9	55.3
Hosiery and knit goods	376	86,402	−5.2	+6.8	1,198,324	−14.0	−8.1	80.1	59.2
Silk goods	265	49,494	−1.9	−14.8	769,681	−8.7	−25.3	69.5	52.9
Woolen and worsted goods	180	46,252	+2.0	−2.2	862,562	+3.2	−8.1	67.3	56.9
Carpets and rugs	33	15,418	−0.3	−6.1	287,781	−0.9	−11.4	62.9	44.5
Dyeing and finishing textiles	144	36,950	−(1)	−10.7	786,926	−2.1	−18.5	83.0	70.0
Clothing, men's	348	54,588	−0.3	−6.5	858,498	+1.3	−19.5	66.6	43.4
Shirts and collars	106	14,067	−8.1	−10.7	163,534	−6.8	−24.4	60.0	40.0
Clothing, women's	396	25,080	−2.8	−18.6	504,605	−9.6	−30.5	71.5	50.1
Millinery and lace goods	133	10,280	+14.1	+0.3	203,825	+22.0	−3.8	77.0	60.9
Corsets and allied garments	30	5,127	+3.4	+2.4	80,198	+5.4	−7.1	101.4	86.1
Cotton small wares	103	9,680	+2.4	−9.8	168,957	+4.5	−19.3	84.8	71.9
Hats, fur-felt	39	5,708	−1.1	−20.7	100,719	−0.4	−33.0	69.1	42.3
Men's furnishings	70	4,732	−13.9	−13.8	63,353	−21.9	−25.1	62.4	46.8
Iron and steel and their products, not including machinery	**1,302**	**328,014**	**−3.0**	**−15.9**	**5,583,036**	**−11.1**	**−38.0**	**62.1**	**36.0**
Iron and steel	203	193,807	−0.9	−16.4	3,112,282	−11.3	−44.0	62.5	32.9
Cast-iron pipe	41	8,698	−7.4	−15.4	140,640	−17.5	−34.8	45.5	30.5
Structural-iron work	168	19,143	−5.5	−25.5	405,143	−9.4	−40.2	58.8	40.3
Hardware	91	23,149	−1.9	−14.9	397,348	−5.7	−29.3	59.3	37.8
Steam fittings and steam and hot-water heating apparatus	105	19,810	−8.2	−27.6	354,403	−14.8	−46.0	44.1	26.9
Stoves	130	12,302	−17.0	−15.7	220,929	−21.9	−31.4	44.4	26.4
Bolts, nuts, washers, and rivets	62	7,532	+0.1	−12.3	139,077	−3.5	−26.2	71.5	47.7
Cutlery and edge tools	156	13,769	−2.3	−7.7	266,246	−4.4	−19.8	70.7	52.3
Forgings, iron and steel	49	5,094	−4.7	−8.4	95,431	−10.9	−26.3	67.2	41.8
Plumbers' supplies	63	4,795	+0.8	−14.3	73,194	−14.2	−31.5	70.6	43.3
Tin cans and other tinware	54	7,385	−2.4	−14.7	157,432	−2.4	−19.6	74.4	48.0
Tools, not including edge tools	119	7,494	−5.7	−12.7	125,187	−12.2	−21.8	77.5	49.6
Wirework	61	5,036	−5.8	+10.1	95,724	−11.5	−4.9	100.6	77.1
Lumber and allied products	**1,396**	**127,031**	**−5.8**	**−22.3**	**1,784,132**	**−14.3**	**−39.4**	**42.2**	**26.3**
Lumber, sawmills	597	60,610	−5.8	−26.5	728,994	−17.1	−47.2	37.4	21.1
Lumber, millwork	348	19,938	−6.9	−19.2	333,573	−12.2	−33.0	43.3	30.1
Furniture	432	45,580	−6.2	−15.0	707,885	−13.4	−31.0	53.3	33.4
Turpentine and rosin	19	903	+0.7	−20.9	13,680	−1.6	−27.4	47.7	40.0
Leather and its manufactures	**422**	**117,745**	**+3.5**	**−2.3**	**1,928,240**	**+6.0**	**−12.1**	**74.9**	**51.5**
Leather	137	21,800	+0.6	−9.4	435,050	−4.3	−20.7	70.3	55.4
Boots and shoes	285	95,945	+4.1	−0.7	1,493,190	+9.5	−9.0	76.0	50.4

[1] Less than one-tenth of 1 per cent.

TABLE 1.—COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLLS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, PER CENTS OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY ROLLS, JANUARY, 1932—Continued

Industry	Establishments reporting in both mos.	Employment			Total pay rolls			Index numbers January 1932 (average, 1926=100)	
		Number on pay rolls, January, 1932	Per cent of change		Amount of pay rolls (1 week) January, 1932	Per cent of change		Employment	Total pay rolls
			December, 1931, to January, 1932	January-1931, to January, 1932		December, 1931, to January, 1932	January, 1931, to January, 1932		
Paper and printing	**1,698**	**212,868**	**−2.1**	**−7.6**	**$5,894,870**	**−5.9**	**−15.4**	**86.5**	**79.4**
Paper and pulp	391	75,787	−0.3	−6.2	1,509,994	−5.9	−22.7	77.4	57.9
Paper boxes	294	21,205	−8.4	−9.9	409,527	−12.1	−17.8	74.6	65.6
Printing, book and job	611	52,556	−1.0	−11.3	1,594,051	−4.3	−18.2	85.9	79.6
Printing, newspapers and periodicals	402	63,320	−2.2	−4.0	2,381,298	−6.3	−8.9	102.8	98.5
Chemicals and allied products	**900**	**132,194**	**−1.0**	**−13.3**	**3,185,302**	**−4.5**	**−20.3**	**89.2**	**70.1**
Chemicals	110	20,747	−1.2	−11.4	540,507	−5.3	−17.0	89.9	71.1
Fertilizers	201	7,196	+5.5	−30.3	104,608	−1.6	−39.0	51.2	40.6
Petroleum refining	100	46,728	−0.2	−17.0	1,388,440	−2.5	−23.6	67.2	62.5
Cottonseed oil, cake, and meal	42	1,772	−15.3	−48.2	23,901	−19.2	−39.8	45.5	49.0
Druggists' preparations	22	5,314	+0.4	−4.9	112,148	−4.9	−12.9	80.7	82.8
Explosives	20	3,229	−3.5	−21.4	60,561	−16.6	−26.8	86.8	56.0
Paints and varnishes	324	14,146	−1.7	−9.4	338,554	−6.0	−18.9	73.4	63.2
Rayon	19	24,105	+1.4	+9.2	406,995	−3.1	−9.0	149.9	128.5
Soap	62	8,957	−1.9	−3.0	209,588	−2.9	−19.9	95.9	87.9
Stone, clay, and glass products	**1,308**	**86,524**	**−11.6**	**−23.4**	**1,567,725**	**−18.6**	**−38.5**	**47.1**	**32.0**
Cement	113	13,620	−9.9	−21.2	266,200	−16.4	−34.2	44.2	29.2
Brick, tile, and terra cotta	689	18,957	−16.9	−29.4	255,509	−27.0	−50.3	31.0	15.9
Pottery	106	13,679	−5.1	−16.6	239,306	−12.4	−26.1	65.6	44.4
Glass	188	35,026	−8.2	−10.7	680,221	−13.1	−22.9	60.1	45 7
Marble, granite, slate, etc.	212	5,242	−18.3	−40.6	126,489	−25.0	−53.3	52.3	39.2
Nonferrous metals, and their products	**547**	**77,339**	**−3.8**	**−15.2**	**1,478,553**	**−9.8**	**−29.9**	**60.8**	**44.4**
Stamped and enameled ware	86	13,239	−4.8	−8.2	229,077	−12.7	−20.6	63.0	43.5
Brass, bronze, and copper products	166	27,214	−2.3	−13.2	528,309	−4.7	−27.6	60.9	43.5
Aluminum manufactures	24	5,493	−0.2	−27.8	101,447	−1.6	−34.5	54.6	38.7
Clocks, clock movements, etc	18	4,073	−9.2	−11.8	59,679	−16.0	−35.7	56.0	37.8
Gas and electric fixtures	44	5,134	−6.5	−17.3	116,265	−13.6	−29.9	77.5	59.2
Plated ware	37	5,019	−9.0	−17.4	105,339	−19.2	−24.9	64.3	44.0
Smelting and refining, copper, lead, and zinc	26	8,938	+0.3	−15.3	168,909	−2.9	−42.4	69.3	50.5
Jewelry	146	8,229	−9.3	−20.4	169,528	−16.6	−26.8	41.7	33.3
Tobacco manufactures	**217**	**52,225**	**−3.4**	**−8.4**	**708,421**	**−9.6**	**−17.2**	**71.2**	**56.5**
Chewing and smoking tobacco and snuff	29	9,477	+3.5	−1.8	142,834	+5.5	−4.1	92.0	83.6
Cigars and cigarettes	188	42,748	−4.6	−9.4	565,587	−12.0	−19.3	68.5	53.2
Transportation equipment	**403**	**290,182**	**+3.1**	**−10.7**	**6,812,231**	**−1.7**	**+5.9**	**62.7**	**46.3**
Automobiles	228	242,536	+5.4	−7.2	5,576,948	−0.7	+19.3	64.9	46.4
Aircraft	35	6,945	−3.1	−27.2	224,263	−4.1	−23.6	228.2	233.5
Cars, electric and steam railroad	30	3,917	−15.8	−48.4	66,947	−16.9	−60.5	17.5	10.3
Locomotives	15	3,568	−3.3	−37.7	85,055	−7.6	−33.3	20.8	17.4
Shipbuilding	95	33,216	−4.1	−13.1	859,018	−4.4	−18.9	90.1	79.7
Rubber products	**140**	**72,451**	**−1.7**	**−5.9**	**1,535,162**	**−0.4**	**−16.8**	**69.6**	**51.4**
Rubber tires and inner tubes	37	44,039	+0.5	−5.2	1,009,489	+6.7	−16.6	65.3	49.2
Rubber boots and shoes	8	9,877	−6.1	−5.9	158,955	−14.8	−17.4	65.6	45.2
Rubber goods, other than boots, shoes, tires, and inner tubes	95	18,535	−3.5	−7.3	366,718	−7.1	−17.2	82.9	61.8

TABLE 1.—COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLLS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, PER CENTS OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND PAY ROLLS, JANUARY, 1932—Continued

Industry	Establishments reporting in both mos.	Employment			Total pay rolls			Index numbers January, 1932 (average, 1926=100)	
		Number on pay rolls, January, 1932	Per cent of change		Amount of pay rolls (1 week) January, 1932	Per cent of change		Employment	Total pay rolls
			December, 1931, to January, 1932	January, 1931, to January, 1932		December, 1931, to January, 1932	January, 1931, to January, 1932		
Machinery, not including transportation equipment	**1,610**	**345,980**	**−4.2**	**−24.5**	**$7,420,064**	**−8.4**	**−35.3**	**59.8**	**42.4**
Agricultural implements	70	8,948	+5.3	−50.0	136,479	+3.3	−58.7	38.8	27.6
Electrical machinery, apparatus, and supplies	239	138,889	−1.1	−18.2	3,317,477	−4.3	−26.5	71.9	57.9
Engines and water wheels	71	13,707	−22.7	−46.9	296,408	−22.7	−56.9	44.2	30.7
Cash registers and calculating machines	44	15,948	+1.1	−10.1	393,380	−4.4	−22.0	77.7	59.6
Foundry and machine shop products	959	116,942	−4.6	−24.5	2,170,259	−12.1	−39.3	55.0	34.5
Machine tools	139	15,255	−4.6	−35.8	342,817	−6.5	−38.5	47.8	34.8
Textile machinery and parts	34	7,465	−0.5	−11.5	173,879	−2.1	−16.0	68.0	56.9
Typewriters and supplies	17	11,256	−4.0	−18.2	178,797	−9.1	−35.2	74.1	46.3
Radio	37	17,570	−3.8	−22.3	410,568	−0.4	−20.8	77.9	73.0
Railroad repair shops	**902**	**98,778**	**−6.2**	**−24.8**	**2,529,212**	**−10.5**	**−30.8**	**51.5**	**44.4**
Electric railroad	429	23,986	−0.4	−11.2	687,774	−4.3	−15.1	73.3	67.4
Steam railroad	473	74,792	−6.7	−26.1	1,841,438	−11.3	−32.4	49.8	42.6
Total—89 industries used in computing index numbers of employment and pay roll	**16,197**	**2,716,535**	**[1]−2.8**	**[1]−13.1**	**54,022,362**	**[1]−6.9**	**[1]−23.7**	**64.8**	**48.6**

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION[2]									
New England	1,971	332,079	−2.4	−12.5	$6,360,235	−4.7	−23.0		
Middle Atlantic	4,000	799,963	−3.9	−13.8	16,974,791	−7.3	−25.3		
East North Central	3,806	830,991	−0.7	−13.5	17,492,323	−5.7	−18.9		
West North Central	1,613	144,489	−2.7	−12.0	3,051,412	−6.3	−21.3		
South Atlantic	2,012	328,065	−0.8	−2.9	4,969,678	−4.8	−15.7		
East South Central	690	99,384	−3.6	−11.2	1,419,269	−6.2	−24.7		
West South Central	748	69,086	−4.3	−18.0	1,358,203	−7.1	−28.4		
Mountain	381	21,413	−23.5	−36.0	468,069	−26.4	−36.9		
Pacific	976	91,065	−5.4	−18.6	1,928,382	−10.6	−31.8		
All divisions	**16,197**	**2,716,535**	**[1]−2.8**	**[1]−13.1**	**54,022,362**	**[1]−6.9**	**[1]−23.7**		

[1] Weighted per cent of change for the combined 89 manufacturing industries.

[2] *New England:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. *Middle Atlantic:* New Jersey, New York, Pennsylvania. *East North Central:* Illinois, Indiana, Michigan, Ohio, Wisconsin. *West North Central:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. *South Atlantic:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. *East South Central:* Alabama, Kentucky, Mississippi, Tennessee. *West South Central:* Arkansas, Louisiana, Oklahoma, Texas. *Mountain:* Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming. *Pacific:* California, Oregon, Washington.

Per Capita Earnings in Manufacturing Industries

ACTUAL per capita weekly earnings in January, 1932, for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics, together with per cents of change in January, 1932, as compared with December, 1931, and January, 1931, are shown in Table 2.

Per capita earnings in January, 1932, for the combined 89 manufacturing industries were 4.2 per cent lower than for December, 1931, and 12.2 per cent lower than for January, 1931.

The average per capita weekly earnings in January, 1932, for the combined 89 manufacturing industries were $19.89.

Per capita earnings given in Table 2 must not be confused with full-time weekly rates of wages. They are actual per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time workers as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN JANUARY, 1932, AND COMPARISON WITH DECEMBER, 1931, AND JANUARY, 1931

Industry	Per capita weekly earnings in January, 1932	Per cent of change compared with—	
		December, 1931	January, 1931
Food and kindred products:			
Slaughtering and meat packing	$23.34	−3.0	−14.0
Confectionery	16.80	−1.3	−10.3
Ice cream	30.67	−1.0	−7.4
Flour	22.68	−1.6	−11.2
Baking	24.64	−0.4	−6.9
Sugar refining, cane	25.42	−2.5	−11.5
Beet sugar	21.92	+10.8	+20.1
Beverages	26.53	−2.0	−9.7
Butter	24.36	−2.1	−8.6
Textiles and their products:			
Cotton goods	12.04	−1.4	−14.9
Hosiery and knit goods	13.87	−9.3	−13.6
Silk goods	15.55	−7.0	−12.5
Woolen and worsted goods	18.65	+1.1	−6.5
Carpets and rugs	18.67	−0.6	−5.8
Dyeing and finishing textiles	21.30	−2.1	−9.0
Clothing, men's	15.73	+1.7	−14.0
Shirts and collars	11.63	+1.4	−15.1
Clothing, women's	20.12	−7.0	−14.9
Millinery and lace goods	19.83	+7.0	−3.8
Corsets and allied garments	15.64	+1.9	−9.5
Cotton small wares	17.45	+2.0	−10.7
Hats, fur-felt	17.65	+0.7	−15.2
Men's furnishings	13.39	−9.3	−12.9
Iron and steel and their products not including machinery:			
Iron and steel	16.06	−10.5	−33.0
Cast-iron pipe	16.17	−10.9	−22.9
Structural-iron work	21.16	−4.2	−19.9
Hardware	17.16	−3.9	−17.2
Steam fittings and steam and hot-water heating apparatus	17.89	−7.2	−25.5
Stoves	17.96	−6.0	−18.8
Bolts, nuts, washers, and rivets	18.46	−3.6	−15.7
Cutlery and edge tools	19.34	−2.1	−12.9
Forgings, iron and steel	18.73	−6.5	−19.5
Plumbers' supplies	15.26	−14.9	−24.9
Tin cans and other tinware	21.32	(1)	−5.6
Tools, not including edge tools	16.70	−6.9	−10.4
Wirework	19.01	−6.0	−13.7
Lumber and allied products:			
Lumber, sawmills	12.03	−11.9	−28.2
Lumber, millwork	16.73	−5.7	−17.2
Furniture	15.53	−7.7	−18.9
Turpentine and rosin	15.15	−2.3	−8.0

[1] No change.

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN JANUARY, 1932, AND COMPARISON WITH DECEMBER, 1931, AND JANUARY, 1931—Con.

Industry	Per capita weekly earnings in January, 1932	Per cent of change compared with—	
		December, 1931	January, 1931
Leather and its manufactures:			
Leather	19.96	−4.9	−12.5
Boots and shoes	15.56	+5.1	−8.6
Paper and printing:			
Paper and pulp	19.92	−5.6	−17.3
Paper boxes	19.31	−4.1	−8.5
Printing, book and job	30.33	−3.3	−7.7
Printing, newspapers and periodicals	37.61	−4.2	−5.0
Chemicals and allied products:			
Chemicals	26.05	−4.2	−6.0
Fertilizers	14.54	−6.7	−12.6
Petroleum refining	29.71	−2.2	−7.8
Cottonseed oil, cake, and meal	13.49	−4.5	+16.2
Druggists preparations	21.10	−5.3	−8.1
Explosives	18.76	−13.5	−6.9
Paints and varnishes	23.93	−4.4	−10.4
Rayon	16.88	−4.5	−16.4
Soap	23.40	−1.1	−17.5
Stone, clay, and glass products:			
Cement	19.54	−7.3	−16.6
Brick, tile, and terra cotta	13.48	−12.1	−29.8
Pottery	17.49	−7.7	−11.2
Glass	19.42	−5.2	−13.5
Marble, granite, slate, etc	24.13	−8.3	−21.6
Nonferrous metals, and their products:			
Stamped and enameled ware	17.30	−8.3	−13.3
Brass, bronze, and copper products	19.41	−2.5	−17.0
Aluminum manufactures	18.47	−1.4	−9.2
Clocks, clock movements, etc	14.65	−7.6	−27.0
Gas and electric fixtures	22.65	−7.6	−15.4
Plated ware	20.99	−11.2	−9.3
Smelting and refining, copper, lead, and zinc	18.90	−3.1	−32.0
Jewelry	20.60	−8.1	−8.0
Tobacco manufactures:			
Chewing and smoking tobacco and snuff	15.07	+1.9	−2.2
Cigars and cigarettes	13.23	−7.8	−11.0
Transportation equipment:			
Automobiles	22.99	−5.8	+27.8
Aircraft	32.29	−1.0	+5.3
Cars, electric and steam-railroad	17.09	−1.3	−23.2
Locomotives	23.84	−4.5	+6.8
Shipbuilding	25.86	−0.4	−6.7
Rubber products:			
Rubber tires and inner tubes	22.92	+6.1	−12.2
Rubber boots and shoes	16.09	−9.4	−12.4
Rubber goods, other than boots, shoes, tires, and inner tubes	19.79	−3.7	−10.5
Machinery, not including transportation equipment:			
Agricultural implements	15.25	−1.9	−17.4
Electrical machinery, apparatus, and supplies	23.89	−3.1	−10.1
Engines and water wheels	21.62	(1)	−0.2
Cash registers and calculating machines	24.67	−5.4	−13.2
Foundry and machine shop products	18.56	−7.8	−19.4
Machine tools	22.47	−2.0	−4.4
Textile machinery and parts	23.29	−1.6	−5.1
Typewriters and supplies	15.88	−5.3	−20.6
Radio	23.37	+3.5	+1.8
Railroad repair shops:			
Electric railroad	28.67	−3.9	−4.5
Steam railroad	24.62	−4.9	−8.6

[1] No change.

General Index Numbers of Employment and Pay Rolls in Manufacturing Industries

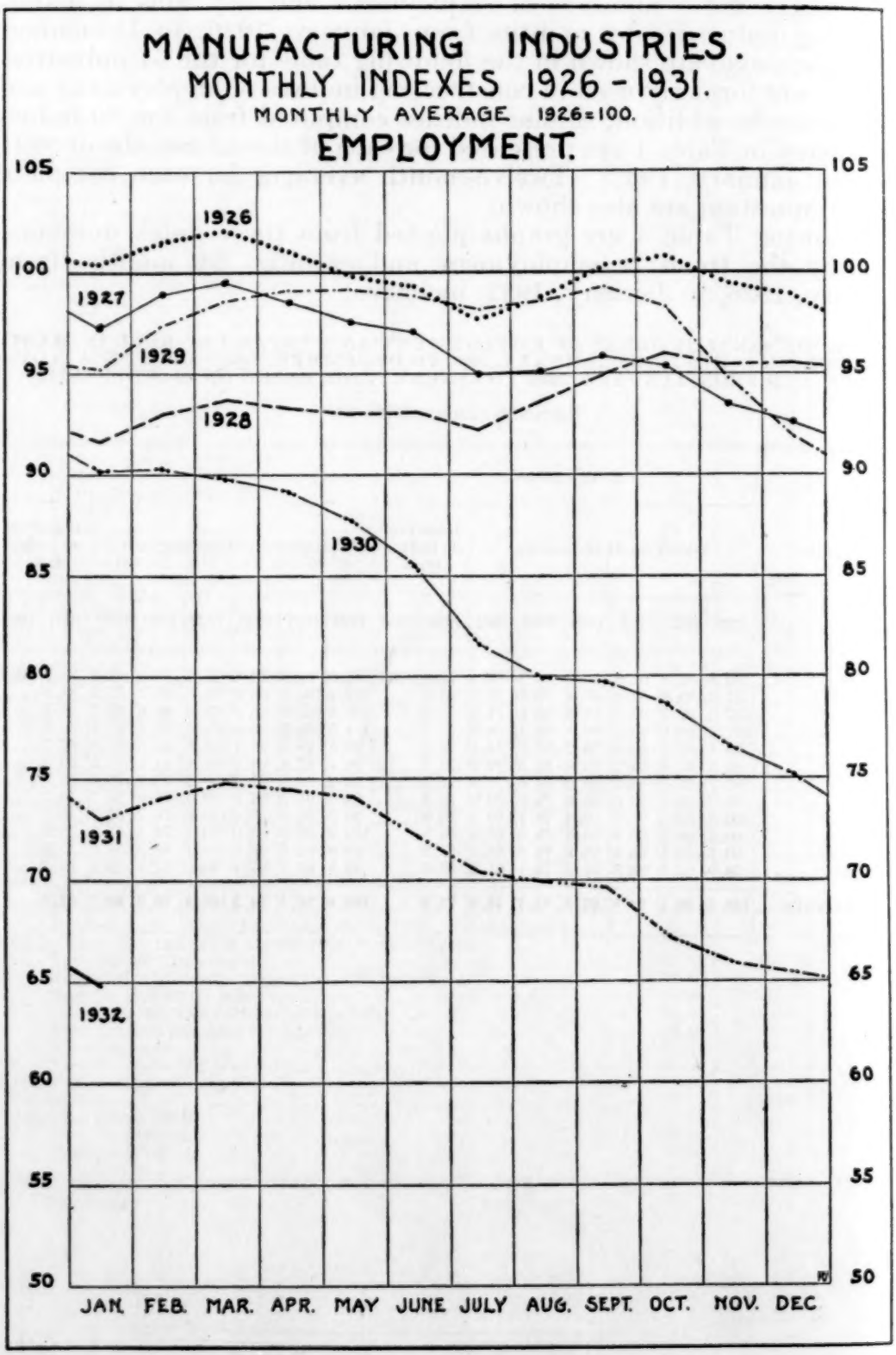
GENERAL index numbers of employment and pay rolls in manufacturing industries by months from January, 1926, to December, 1931, inclusive, are shown in the following table for the 54 industries which were formerly used in constructing indexes of employment and earnings. In addition, similar indexes computed from the 89 industries listed in Table 1 are presented for each of the 12 months of 1931 and for January, 1932. Twelve-month averages for each complete year in question are also shown.

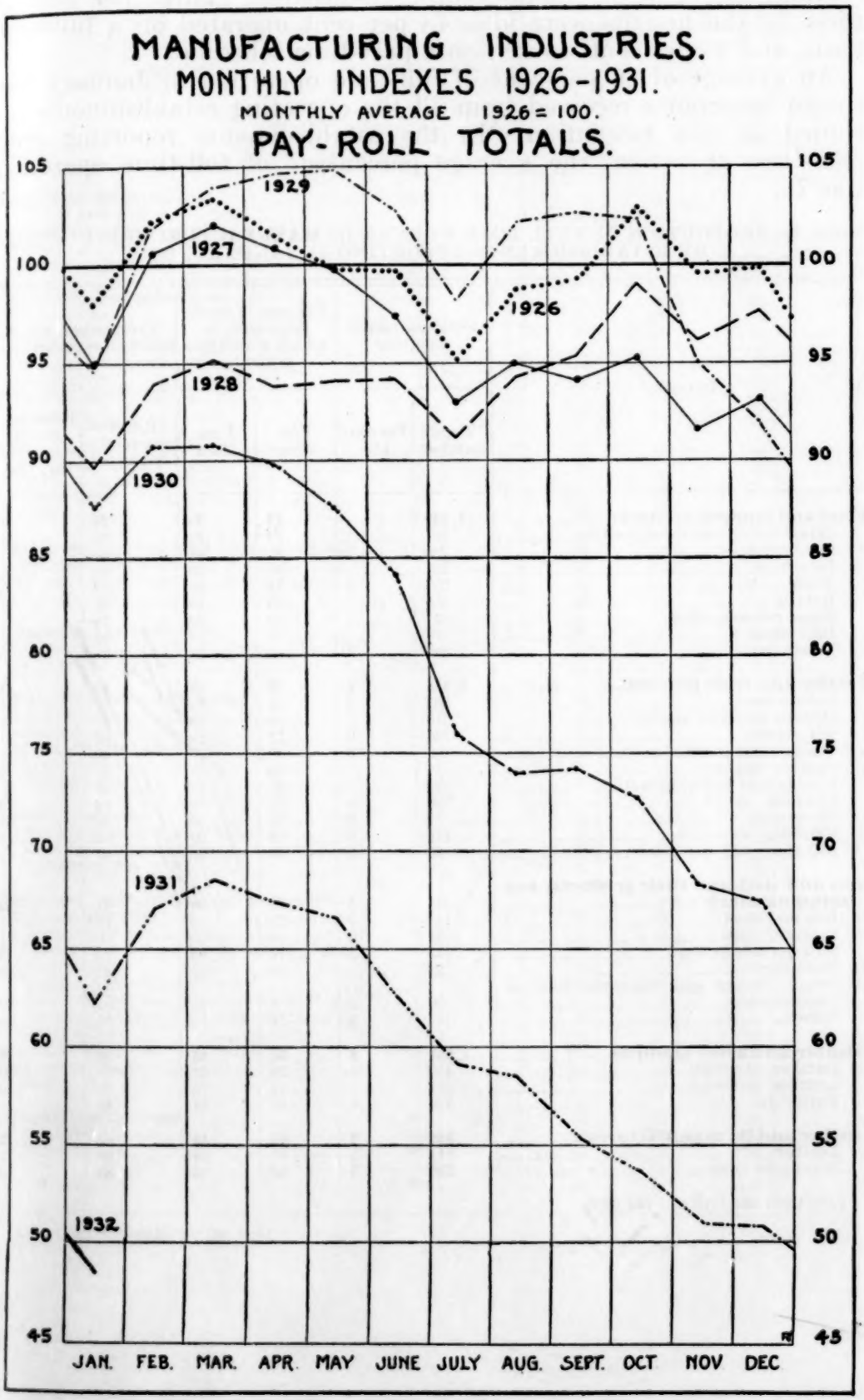
Following Table 3 are graphs plotted from these index numbers, showing the trend in employment and earnings by months from January, 1926, to January, 1932, inclusive.

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND TOTAL PAY ROLL IN **MANUFACTURING** INDUSTRIES, JANUARY, 1926, TO DECEMBER, 1931, BASED ON 54 INDUSTRIES, AND FROM JANUARY, 1931, TO JANUARY, 1932, BASED ON 89 INDUSTRIES

[12-month average, 1926=100]

Month	Employment								Total pay roll							
	Based on 54 industries						Based on 89 industries		Based on 54 industries						Based on 89 industries	
	1926	1927	1928	1929	1930	1931	1931	1932	1926	1927	1928	1929	1930	1931	1931	1932
January	100.4	97.3	91.6	95.2	90.2	73.1	74.6	64.8	98.0	94.9	89.6	95.5	87.6	62.3	63.7	48.6
February	101.5	99.0	93.0	97.4	90.3	74.1	75.3	-----	102.2	100.6	93.9	101.8	90.7	67.0	68.1	-----
March	102.0	99.5	93.7	98.6	89.8	74.8	75.9	-----	103.4	102.0	95.2	103.9	90.8	68.5	69.6	-----
April	101.0	98.6	93.3	99.1	89.1	74.5	75.7	-----	101.5	100.8	93.8	104.6	89.8	67.4	68.5	-----
May	99.8	97.6	93.0	99.2	87.7	74.1	75.2	-----	99.8	99.8	94.1	104.8	87.6	66.6	67.7	-----
June	99.3	97.0	93.1	98.8	85.5	72.2	73.4	-----	99.7	97.4	94.2	102.8	84.1	62.5	63.8	-----
July	97.7	95.0	92.2	98.2	81.6	70.4	71.7	-----	95.2	93.0	91.2	98.2	75.9	59.1	60.3	-----
August	98.7	95.1	93.6	98.6	79.9	70.0	71.2	-----	98.7	95.0	94.2	102.1	73.9	58.5	59.7	-----
September	100.3	95.8	95.0	99.3	79.7	69.6	70.9	-----	99.3	94.1	95.4	102.6	74.2	55.4	56.7	-----
October	100.7	95.3	95.9	98.3	78.6	67.3	68.9	-----	102.9	95.2	99.0	102.3	72.7	53.7	55.3	-----
November	99.5	93.5	95.4	94.8	76.5	65.4	67.1	-----	99.6	91.6	96.1	95.1	68.3	51.0	52.5	-----
December	98.9	92.6	95.5	91.9	75.1	65.3	66.7	-----	99.8	93.2	97.7	92.0	67.4	50.9	52.2	-----
Average	**100.0**	**96.4**	**93.8**	**97.5**	**83.7**	**70.9**	**72.2**	-----	**100.0**	**96.5**	**94.5**	**100.4**	**80.3**	**60.2**	**61.5**	-----


MANUFACTURING INDUSTRIES.
MONTHLY INDEXES 1926 - 1931.
MONTHLY AVERAGE 1926=100.
EMPLOYMENT.
105
100
95
90
85
80
75
70
65
60
55
50
1926
1927
1929
1928
1930
1931
1932
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC


MANUFACTURING INDUSTRIES.
MONTHLY INDEXES 1926-1931.
MONTHLY AVERAGE 1926 = 100.
PAY-ROLL TOTALS.
105
100
95
90
85
80
75
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60
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50
45
1929
1927
1926
1928
1930
1931
1932
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT NOV DEC

Time Worked in Manufacturing Industries in January, 1932

REPORTS as to working time in January were received from 11,762 establishments in 68 manufacturing industries. Three per cent of these establishments were idle, 48 per cent operated on a full-time basis, and 49 per cent worked on a part-time schedule.

An average of 86 per cent of full-time operation in January was shown by reports received from all the operating establishments included in this tabulation. In the establishments reporting only part-time operation, the average percentage of full-time operation was 73.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN JANUARY, 1932

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Food and kindred products	**1,930**	(1)	**72**	**28**	**94**	**78**
Slaughtering and meat packing	167		79	21	98	89
Confectionery	260	(1)	51	48	89	77
Ice cream	238		63	37	95	86
Flour	351	1	74	26	92	71
Baking	610	(1)	86	14	97	81
Sugar refining, cane	11		18	82	79	74
Beet sugar	44		73	27	95	83
Beverages	249	1	65	34	91	73
Textiles and their products	**1,975**	**4**	**59**	**37**	**91**	**76**
Cotton goods	501	2	53	45	87	73
Hosiery and knit goods	316	3	59	39	91	76
Silk goods	236	6	72	22	96	81
Woolen and worsted goods	166	3	60	37	90	75
Carpets and rugs	24		29	71	80	72
Dyeing and finishing textiles	124		47	53	88	76
Clothing, men's	228	8	56	36	94	79
Shirts and collars	77	9	51	40	92	82
Clothing, women's	218	9	72	20	94	72
Millinery and lace goods	85	1	68	31	93	79
Iron and steel and their products, not including machinery	**579**	**5**	**15**	**80**	**71**	**66**
Iron and steel	138	7	24	70	75	67
Cast-iron pipe	40	10	10	80	60	55
Structural-iron work	145	3	14	83	76	72
Hardware	53		23	77	77	70
Steam fittings and hot-water heating apparatus	96	2	3	95	61	59
Stoves	107	8	14	79	71	66
Lumber and allied products	**1,066**	**4**	**31**	**65**	**79**	**70**
Lumber, sawmills	450	5	28	67	78	69
Lumber, millwork	281	1	22	76	77	70
Furniture	335	4	42	54	83	71
Leather and its manufactures	**350**	**2**	**43**	**55**	**86**	**75**
Leather	114	1	45	54	88	77
Boots and shoes	236	3	42	56	85	73

[1] Less than one-half of 1 per cent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN JANUARY, 1932—Continued

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Paper and printing	**1,432**	(1)	**50**	**50**	**89**	**78**
Paper and pulp	294	1	41	58	84	74
Paper boxes	250		25	75	82	76
Printing, book and job	542		41	59	89	81
Printing, newspapers and periodicals	346	1	90	10	99	88
Chemicals and allied products	**664**	**1**	**64**	**35**	**92**	**77**
Chemicals	88	1	76	23	95	79
Fertilizers	159	1	67	32	93	78
Petroleum refining	68	1	82	16	98	89
Druggists' preparations	19		53	47	94	87
Explosives	17		59	41	82	55
Paints and varnishes	296	1	57	41	90	75
Rayon	17		29	71	83	76
Stone, clay, and glass products	**649**	**16**	**37**	**47**	**80**	**63**
Cement	84	23	65	12	96	74
Brick, tile, and terra cotta	314	22	17	61	69	61
Pottery	96	4	23	73	72	63
Glass	155	9	72	19	95	76
Nonferrous metals and their products	**341**	**1**	**35**	**64**	**82**	**72**
Stamped and enameled ware	71		21	79	78	72
Brass, bronze, and copper products	136	1	31	68	81	73
Jewelry	134	(1)	46	53	84	70
Tobacco manufactures	**192**	**6**	**25**	**69**	**81**	**74**
Chewing and smoking tobacco and snuff	25		52	48	92	84
Cigars and cigarettes	167	7	21	72	79	73
Transportation equipment	**315**	**2**	**44**	**53**	**86**	**74**
Automobiles	166	1	30	69	81	73
Aircraft	33	6	70	24	95	77
Cars, electric and steam railroad	25		12	88	77	74
Locomotives	12		50	50	84	67
Shipbuilding	79	4	73	23	95	78
Rubber products	**128**		**34**	**66**	**84**	**75**
Rubber tires and inner tubes	34		18	82	80	76
Rubber boots and shoes	7		14	86	82	79
Rubber goods, other	87		41	59	85	75
Machinery, not including transportation equipment	**1,354**	**1**	**30**	**69**	**78**	**68**
Agricultural implements	66	2	30	68	81	72
Electrical machinery, apparatus, and supplies	179		22	78	80	75
Engines and water wheels	61	3	25	72	73	64
Cash registers and calculating machines	40		60	40	88	69
Foundry and machine-shop products	804	1	30	68	76	66
Machine tools	129	1	19	81	74	69
Textile machinery and parts	31		39	61	86	78
Typewriters and supplies	13		46	54	78	58
Radio	31		71	29	96	85
Railroad repair shops	**787**	(1)	**50**	**49**	**91**	**81**
Electric railroad	364		70	30	96	85
Steam railroad	423	1	33	66	86	79
Total	**11,762**	**3**	**48**	**49**	**86**	**73**

[1] Less than one-half of 1 per cent.

Employment in Nonmanufacturing Industries in January, 1932

IN THE following table are presented employment and pay-roll data for 14 groups of nonmanufacturing industries, the totals of which also appear in the summary table of employment and total pay roll.

With one exception, each group showed decreases in both employment and earnings from December, 1931, to January, 1932, and from January, 1931, to January, 1932. The exception was an increase in employment of 0.1 per cent in hotels over the month interval.

TABLE 1.—COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL NONMANUFACTURING ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, PER CENT OF CHANGE OVER A YEAR INTERVAL, AND INDEX NUMBERS OF EMPLOYMENT AND TOTAL PAY ROLL, JANUARY, 1932.

Industrial group	Establishments reporting in both mos.	Employment			Total pay roll			Index numbers January, 1932 (average, 1929=1,00)	
		Number on pay roll, January, 1932	Per cent of change		Amount of pay roll (1 week), January, 1932	Per cent of change		Employment	Total pay roll
			December, 1931, to January, 1932	January, 1931, to January, 1932		December, 1931, to January, 1932	January, 1931, to January, 1932		
Anthracite mining	160	104,183	−4.5	−15.9	$2,441,555	−21.6	−31.1	76.2	61.5
Bituminous coal mining	1,199	187,787	−0.5	−14.0	2,827,087	−10.2	−35.9	80.8	47.0
Metalliferous mining	239	28,465	−3.8	−27.8	531,045	−15.4	−46.0	49.3	29.7
Quarrying and nonmetallic mining	618	20,088	−9.3	−24.1	334,354	−18.1	−40.1	48.9	30.2
Crude petroleum producing	236	19,509	−5.6	−26.6	635,767	−15.4	−35.0	54.9	46.5
Telephone and telegraph	8,178	293,708	−0.1	−8.3	8,515,984	−3.8	−7.5	83.0	89.1
Power, light, and water	3,383	230,528	−1.1	−10.0	7,186,307	−3.1	−10.3	89.3	88.4
Electric railroad operation and maintenance exclusive of car shops	498	133,361	−0.5	−8.5	3,997,021	−4.5	−13.2	79.5	74.3
Wholesale trade	2,457	66,213	−2.2	−8.6	1,916,984	−4.7	−15.3	81.8	74.1
Retail trade	11,933	334,276	−20.6	−6.3	7,497,262	−17.1	−12.8	84.3	78.0
Hotels	2,262	140,772	+0.1	−11.4	2,157,811	−2.0	−18.8	84.2	73.9
Canning and preserving	783	22,792	−14.1	−28.4	362,503	−13.9	−31.0	35.0	31.8
Laundries	813	54,882	−0.7	−6.4	955,826	−1.3	−11.9	(1)	(1)
Dyeing and cleaning	295	9,404	−3.3	−7.8	192,024	−3.1	−15.2	(1)	(1)

[1] Data not available.

Indexes of Employment and Total Pay Roll for Nonmanufacturing Industries

INDEX numbers of employment and total pay roll for the years 1929, 1930, and 1931, and by months, January, 1931, to January, 1932, for 12 of the 14 nonmanufacturing industries appearing in the preceding table, are shown in Table 2. Index numbers for the laundering and the dyeing and cleaning groups are not presented, as data for the index base year (1929) are not available.

TABLE 2.—INDEXES OF EMPLOYMENT AND TOTAL PAY ROLL FOR **NONMANUFACTURING** INDUSTRIES, 1929 TO JANUARY, 1932

[12-month average, 1929=100]

Year and month	Anthracite mining		Bituminous coal mining		Metalliferous mining		Quarrying and nonmetallic mining		Crude petroleum producing		Telephone and telegraph		Power, light, and water		Operation and maintenance of electric railroads [1]		Wholesale trade		Retail trade		Hotels		Canning and preserving	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
1929: Average	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
1930: Average	**93.4**	**95.3**	**93.4**	**81.3**	**83.2**	**78.0**	**84.3**	**79.3**	**87.4**	**85.9**	**97.5**	**102.9**	**103.0**	**104.3**	**93.4**	**93.5**	**96.0**	**95.9**	**95.9**	**96.2**	**99.2**	**98.5**	**103.9**	**96.1**
1931																								
January	90.6	89.3	93.9	73.3	68.3	55.0	64.4	50.4	74.8	71.5	90.5	96.3	99.2	98.6	86.9	85.6	89.5	87.5	90.0	89.4	95.0	91.0	48.9	46.1
February	89.5	101.9	91.5	68.3	65.3	54.6	66.6	54.4	73.2	70.0	89.2	94.8	97.8	99.7	86.6	87.1	88.2	88.4	87.1	86.7	96.8	93.7	48.3	48.6
March	82.0	71.3	88.8	65.2	63.5	52.8	70.0	58.2	72.2	73.2	88.6	97.9	96.7	102.4	86.4	88.1	87.4	89.1	87.8	87.5	96.8	93.4	53.0	50.3
April	85.2	75.2	85.9	58.6	63.9	51.4	76.1	62.6	69.8	66.3	88.1	95.0	97.1	97.6	86.8	86.6	87.4	85.2	90.1	88.3	95.9	89.9	59.6	57.1
May	80.3	76.1	82.4	54.4	62.4	49.3	75.0	62.3	67.8	64.7	87.4	94.1	97.6	98.7	85.9	85.1	87.1	84.7	89.9	88.0	92.5	87.7	56.0	56.0
June	76.1	66.7	78.4	52.4	60.0	46.1	72.3	60.1	65.0	62.7	86.9	95.0	97.2	98.3	85.3	84.8	87.1	84.1	89.1	87.6	91.6	85.4	70.6	58.6
July	65.1	53.7	76.4	50.4	56.2	41.3	71.0	57.3	65.3	59.2	86.6	93.3	96.7	97.4	85.6	83.3	86.8	83.3	83.9	83.3	93.3	85.2	102.2	74.2
August	67.3	56.4	77.0	50.6	55.8	40.2	68.9	55.1	62.4	56.3	85.9	92.3	95.9	96.2	84.8	81.9	86.5	82.1	81.8	80.3	92.8	83.8	142.9	104.7
September	80.0	64.9	80.4	53.6	55.5	40.0	66.6	51.2	61.2	55.2	85.0	92.1	94.7	94.3	84.0	81.2	86.1	81.4	86.6	83.5	90.6	81.9	180.1	129.4
October	86.8	91.1	81.3	56.2	53.8	37.4	64.5	48.7	60.4	54.4	84.1	91.6	92.7	93.2	82.7	79.0	85.2	79.9	89.8	84.6	88.5	79.7	108.1	77.6
November	[2] 83.5	[2] 79.5	81.1	54.6	52.8	35.1	59.3	43.3	57.6	52.0	83.5	89.7	91.3	93.3	81.5	79.7	84.1	79.7	90.9	85.4	85.9	77.1	60.8	48.1
December	[2] 79.8	[2] 78.4	81.2	52.3	51.2	34.3	53.9	36.9	58.2	54.9	83.1	92.7	90.3	91.2	79.9	77.8	83.7	77.8	106.2	94.1	84.1	75.4	40.7	36.9
1931: Average	[2] **80.5**	**75.4**	**83.7**	**57.5**	**59.1**	**44.8**	**67.4**	**53.4**	**65.7**	**61.7**	**86.6**	**93.7**	**95.6**	**96.7**	**84.7**	**83.4**	**86.6**	**83.6**	**89.4**	**86.6**	**92.0**	**85.4**	**80.9**	**65.6**
1932																								
January	76.2	61.5	80.8	47.0	49.3	29.7	48.9	30.2	54.9	46.5	83.0	89.1	89.3	88.4	79.5	74.3	81.8	74.1	84.3	78.0	84.2	73.9	35.0	31.8

[1] Not including electric-railroad car building and repairing; see transportation equipment and electric repair shop groups, manufacturing industries, Table 1.
[2] Revised.

Trend of Employment in January, 1932, by States

IN THE following table are shown the fluctuations in employment and earnings in January, 1932, as compared with December, 1931, in certain industrial groups, by States. These tabulations have been prepared from information secured directly from reporting establishments and from data supplied by cooperating State agencies. The fluctuations in employment and earnings over the month interval in the combined total of the 15 industrial groups included in this monthly survey are presented, together with the changes in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous coal mining, crude petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundries, and dyeing and cleaning groups. In presenting data concerning the public utility group, the totals of the telephone and telegraph, water-light-power, and electric railroad operation groups have been combined and are presented as one group in this State compilation. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly earnings in December and January as reported by identical establishments in this industry are included, however, in the tabulation of "all groups" by States.

As the anthracite mining industry is confined entirely to the State of Pennsylvania, the changes reported in this industry in the summary table are the fluctuations in this industry by State total.

Where the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial group tabulation, but have been included in the State totals for "all groups." Data are not presented for any industrial group where the representation covers less than three establishments.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	451	48,742	−3.0	$636,629	−6.2	196	31,729	−2.8	$415,781	−5.7
Arkansas	*442*	*14,442*	*−2.6*	*230,517*	*−5.2*	*181*	*8,896*	*−2.9*	*120,441*	*−5.8*
Arizona	356	10,981	−6.4	262,096	−7.2	58	2,134	−6.2	51,162	−10.4
California	*1,378*	*203,568*	*−6.3*	*5,316,833*	*−6.8*	*1,131*	*119,504*	*−3.4*	*2,994,499*	*−6.4*
Colorado	493	25,986	−15.3	615,188	−15.7	121	8,046	−29.7	186,410	−31.4
Connecticut	928	126,108	−4.2	2,516,897	−7.1	572	106,462	−4.2	1,967,964	−8.0
Delaware	122	7,887	−0.7	170,841	+0.1	48	5,415	+5.7	116,528	+4.4
Florida	534	25,560	+13.3	459,952	+5.9	132	14,355	+12.9	223,851	+9.1
Georgia	566	60,029	−0.8	852,624	−4.0	257	46,781	−0.7	533,950	−6.4
Idaho	148	7,061	−14.1	131,936	−20.9	38	3,564	−24.4	59,497	−34.4
Illinois	*1,354*	*289,105*	*−2.8*	*6,964,705*	*−2.7*	*1,056*	*182,480*	*−3.1*	*3,955,425*	*−3.3*
Indiana	1,239	125,254	−3.6	2,646,407	−6.5	574	92,330	−2.3	1,915,571	−5.8
Iowa	1,150	46,006	−2.7	961,433	−8.4	449	25,347	−2.1	503,460	−8.8
Kansas	617	28,327	−0.3	619,462	−1.9	167	15,481	+0.3	350,559	−1.1
Kentucky	933	57,971	−3.6	926,579	−8.5	158	18,139	−3.7	307,735	−4.4
Louisiana	441	27,679	−7.5	454,869	−9.6	162	15,925	−6.8	233,816	−10.2
Maine	508	37,180	−1.0	714,693	−4.8	172	30,857	+0.3	558,562	−4.4
Maryland	[1] *869*	*80,205*	*−4.4*	*1,599,688*	*−6.0*	*506*	*58,950*	*−3.0*	*1,100,619*	*−6.6*
Massachusetts	*7,357*	*329,180*	*−4.7*	*7,683,202*	*−6.2*	*1,051*	*150,499*	*−0.7*	*2,940,823*	*−2.2*
Michigan	1,660	296,240	+1.2	6,810,575	−3.3	*446*	*218,754*	*+5.0*	*5,197,043*	*−0.5*
Minnesota	1,079	61,477	−6.5	1,408,711	−8.4	263	30,012	−5.3	653,096	−10.2
Mississippi	386	10,411	−3.5	134,389	−10.2	76	6,418	−3.3	66,008	−11.8
Missouri	1,102	107,208	−2.0	2,358,607	−5.0	502	59,499	+0.6	1,206,799	−2.9
Montana	250	7,803	−5.0	201,472	−11.9	46	2,882	−7.0	63,866	−10.6
Nebraska	628	22,403	−12.4	534,589	−10.3	122	10,884	−16.8	263,407	−11.9
New Hampshire	378	25,073	−5.2	452,862	−3.5	136	21,389	−5.0	357,124	−2.8
New Jersey	1,450	200,194	−4.1	4,898,782	−5.4	[2] *756*	*183,584*	*−2.8*	*4,411,076*	*−2.3*
New Mexico	122	4,240	+0.1	78,185	−11.3	22	462	+1.3	6,621	−2.8
Nevada	84	1,165	+1.4	34,001	−2.5	12	195	([3])	6,856	−2.3
New York	3,128	508,860	−5.5	13,037,634	−7.2	[4] *1,692*	*341,384*	*−4.0*	*8,313,505*	*−5.5*
North Carolina	1,021	83,538	−0.2	1,077,747	−4.4	441	77,287	−0.3	971,136	−4.3
North Dakota	308	3,492	−2.6	82,122	−6.5	56	1,088	−4.7	29,187	−10.3
Ohio	3,174	344,409	−3.5	7,117,117	−7.0	1,437	250,736	−1.3	5,097,195	−5.5
Oklahoma	547	22,692	−5.4	514,975	−9.6	95	8,334	−0.9	181,656	−6.2
Oregon	738	25,510	−8.8	552,476	−11.0	176	14,043	−11.0	261,142	−16.3
Pennsylvania	4,692	610,944	−4.5	12,153,190	−12.0	1,868	333,840	−4.6	5,952,038	−10.5
Rhode Island	500	54,347	−2.0	1,134,942	−2.1	271	42,744	−0.4	838,650	−1.3
South Carolina	392	47,040	−0.6	531,370	+0.1	175	42,938	−([5])	458,629	+0.5
South Dakota	216	5,555	−3.2	138,516	−5.4	45	2,003	−0.1	42,729	−4.7
Tennessee	727	60,959	−5.4	930,318	−8.1	264	43,083	−4.1	628,338	−6.8
Texas	*505*	*58,844*	*−4.2*	*1,464,306*	*−5.7*	*300*	*37,003*	*−4.0*	*955,914*	*−6.0*
Utah	239	13,212	−6.1	283,217	−11.9	60	3,154	−22.3	58,121	−31.9
Vermont	353	9,509	−6.4	201,010	−8.5	127	5,215	−9.6	104,885	−13.7
Virginia	899	65,804	−3.7	1,124,388	−5.3	252	47,120	−2.0	778,733	−3.7
Washington	803	46,512	−8.3	1,043,809	−10.5	248	23,414	−5.5	449,213	−10.8
West Virginia	684	83,145	−1.0	1,454,107	−8.6	185	32,088	−3.3	644,256	−9.0
Wisconsin	*1,171*	*30,859*	*−11.6*	*674,808*	*−12.3*	*836*		*−2.6*		*−9.7*
Wyoming	135	5,794	−7.3	152,862	−18.2	23	1,456	−22.6	46,290	−12.4

[1] Includes building construction.
[2] Includes laundries.
[3] No change.
[4] Includes laundering and cleaning.
[5] Less than one-tenth of 1 per cent.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Wholesale trade					Retail trade				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	16	554	−2.8	$16,501	−5.8	32	2,546	−15.4	$42,453	−12.9
Arkansas	*18*	*455*	*−0.4*	*13,482*	*−3.2*	*156*	*1,532*	*−7.1*	*28,165*	*−9.1*
Arizona	17	138	−2.8	3,681	−3.1	179	1,262	−21.4	25,610	−4.2
California	*55*	*3,769*	*−1.4*	*119,978*	*−2.7*	*95*	*28,757*	*−23.9*	*654,924*	*−18.8*
Colorado	21	640	+1.4	21,327	+0.8	37	3,692	−23.1	76,621	−17.9
Connecticut	55	1,214	+1.6	36,997	−0.8	101	4,722	−14.7	101,971	−9.6
Delaware	9	108	+5.9	2,281	−4.0	13	143	−28.5	2,628	−16.5
Florida	38	590	−1.3	15,393	−7.6	76	1,286	−0.2	29,750	−6.2
Georgia	31	369	−3.1	10,694	−4.6	35	2,095	−19.9	36,833	−15.6
Idaho	8	121	−3.2	3,488	−9.3	24	630	−3.4	12,436	−5.0
Illinois	*16*	*868*	*−12.7*	*23,247*	*−10.2*	*54*	*18,317*	*−6.3*	*471,897*	*−5.5*
Indiana	53	1,180	+0.7	33,272	−5.5	243	6,528	−19.6	131,484	−14.8
Iowa	35	1,114	−1.9	33,192	−5.8	113	3,036	−20.9	63,600	−31.0
Kansas	21	627	−0.8	18,432	+5.3	30	1,285	−17.3	25,403	−8.0
Kentucky	19	511	+5.4	11,026	−3.4	198	2,010	−9.7	38,464	−9.2
Louisiana	31	800	−0.6	18,123	−4.1	53	3,021	−22.3	49,197	−18.1
Maine	13	329	−3.8	8,595	−5.1	63	1,128	−8.3	23,885	−8.5
Maryland	*30*	*806*	*−1.4*	*19,872*	*−1.5*	*43*	*5,101*	*−23.6*	*93,055*	*18.8*
Massachusetts	*693*	*14,171*	*−6.3*	*425,450*	*−7.3*	*3,947*	*60,259*	*−12.1*	*1,357,082*	*12.0*
Michigan	50	1,296	+1.9	42,392	−3.2	428	11,871	−25.9	281,797	−22.1
Minnesota	61	4,052	−1.9	117,981	−5.6	344	7,609	−20.5	152,178	−14.3
Mississippi	5	134	+0.8	2,936	+0.6	71	427	−20.5	5,840	−18.0
Missouri	53	5,142	−2.1	133,078	−3.0	136	6,196	−26.5	130,536	−23.0
Montana	11	218	+0.9	8,006	+0.8	20	345	−14.2	7,948	−7.9
Nebraska	31	887	−2.5	26,228	−3.8	90	1,358	−26.1	27,928	−24.4
New Hampshire	14	172	−2.3	5,120	−1.7	49	520	−22.7	11,208	−12.4
New Jersey	30	675	−4.8	21,269	−2.1	412	7,892	−31.4	191,008	−25.6
New Mexico	6	108	−12.9	3,931	−4.4	10	95	−5.9	2,449	−10.1
Nevada						3	22	−8.3	485	−14.3
New York	128	2,281	−2.3	75,960	−6.9	184	47,070	−25.9	1,201,262	−22.5
North Carolina	21	478	−5.2	12,468	−4.9	438	1,862	−2.2	29,902	−10.3
North Dakota	15	191	−2.6	6,084	−8.2	39	384	−15.4	7,106	−8.5
Ohio	147	3,798	−0.5	107,973	−3.4	674	26,321	−25.6	557,293	−22.0
Oklahoma	37	640	−3.6	17,164	−6.5	45	1,185	−12.9	22,296	−11.9
Oregon	42	1,035	−5.0	29,728	−5.4	255	2,321	−13.3	53,773	−6.3
Pennsylvania	137	3,445	−0.7	96,007	−3.4	588	27,782	−17.9	603,026	−15.2
Rhode Island	38	930	−13.8	23,043	−8.4	115	5,014	−13.3	115,240	−9.3
South Carolina	19	247	−0.4	5,986	−4.0	90	694	−28.5	10,533	−12.5
South Dakota	6	98	−3.0	3,085	−6.0	18	253	−18.4	4,974	−11.0
Tennessee	32	728	−7.4	16,382	−4.8	69	3,530	−27.1	60,291	−27.7
Texas	*65*	*2,657*	*+2.7*	*77,027*	*+1.7*	*59*	*6,967*	*−9.7*	*141,646*	*−9.4*
Utah	13	440	−0.2	11,709	−8.5	23	1,053	−6.1	15,452	−8.4
Vermont	5	111	−0.9	3,053	−0.3	35	326	−5.8	7,118	−5.0
Virginia	33	827	−1.8	21,121	−4.9	371	2,878	−22.8	56,460	−18.0
Washington	85	2,087	−1.5	64,515	−3.6	140	5,726	−27.5	116,388	−20.1
West Virginia	37	612	−3.9	19,916	−2.2	50	982	−18.3	19,511	−12.3
Wisconsin	*45*	*1,918*	*−2.4*	*46,612*	*−6.8*	*59*	*8,504*	*−24.9*	*140,400*	*−23.4*
Wyoming	9	46	(3)	1,586	−9.4	15	156	−4.9	4,406	−6.1

[3] No change.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	6	421	−2.1	$5,035	−28.0					
Arkansas	8	201	+45.7	2,546	+17.6					
Arizona						16	4,976	−6.3	$123,092	−9.5
California	25	654	−16.6	13,143	−24.3	17	1,563	−4.9	39,969	−11.3
Colorado						12	589	−5.6	16,663	−10.1
Connecticut	7	149	+2.8	2,278	−32.9					
Delaware										
Florida	7	607	+3.9	7,681	+3.6					
Georgia	12	537	−12.5	5,747	−7.4					
Idaho						8	1,821	(1)	39,089	−4.2
Illinois	28	463	−22.3	8,597	−15.6					
Indiana	37	1,620	+4.9	30,475	−3.7					
Iowa	15	209	+13.0	3,287	−2.1					
Kansas	14	468	+1.3	10,356	+1.3	9	218	+45.3	3,978	+51.2
Kentucky	26	470	−29.6	3,962	−38.3					
Louisiana	3	349	+12.6	4,616	+10.5					
Maine	5	159	−44.0	5,225	−34.9					
Maryland	*19*	*428*	*−5.7*	*6,264*	*−17.2*					
Massachusetts										
Michigan	20	354	−5.9	5,696	−19.1	41	8,703	−4.7	92,374	−29.9
Minnesota	5	84	−21.5	1,124	−44.8	33	1,373	−13.5	26,023	−24.1
Mississippi										
Missouri	17	285	+3.3	4,028	−9.5	16	2,008	+7.6	30,656	+4.9
Montana						14	127	−13.0	3,062	−4.6
Nebraska	40	35	−61.5	374	−62.7					
New Hampshire	13	100	−40.8	2,094	−45.2					
New Jersey	3	48	−20.0	1,278	−33.2	3	113	−3.4	2,272	−19.1
New Mexico										
Nevada						16	374	+8.1	10,341	−0.2
New York	47	1,102	−38.7	24,646	−50.3					
North Carolina	9	190	−18.5	2,359	−19.3					
North Dakota										
Ohio	56	1,609	−3.5	29,240	−20.9					
Oklahoma						25	376	−33.1	8,077	−32.3
Oregon						3	45	−22.4	877	−48.3
Pennsylvania	50	2,565	−1.6	25,856	−18.9					
Rhode Island										
South Carolina	6	115	−34.7	635	−24.5					
South Dakota										
Tennessee	18	1,126	−8.5	16,759	−3.3	4	302	−1.0	5,118	+0.7
Texas	*8*	*704*	*−0.1*	*16,306*	*−6.0*					
Utah						8	2,421	+1.7	51,052	−7.8
Vermont	39	2,314	−2.6	52,733	+0.3					
Virginia	18	888	−20.4	9,680	−31.8					
Washington	7	111	+8.8	2,095	−0.4	3	70	−32.0	1,246	−46.4
West Virginia	6	469	−2.1	5,070	−11.0					
Wisconsin							*767*	*−2.7*	*11,629*	*−20.6*
Wyoming										

[1] No change.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Bituminous coal mining					Crude petroleum producing				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	39	8,693	−0.9	$80,945	−5.5					
Arkansas	*6*	*545*	*−6.8*	*7,334*	*−10.8*	6	165	−4.1	$3,938	−5.3
Arizona										
California						39	5,070	−1.8	173,035	−5.3
Colorado	35	4,383	−0.5	101,983	+0.1					
Connecticut										
Delaware										
Florida										
Georgia										
Idaho										
Illinois	*30*	*8,188*	*+0.9*	*172,023*	*+7.1*	7	191	−0.5	3,954	−1.3
Indiana	47	6,215	−0.7	148,146	−9.2					
Iowa	19	2,399	+2.6	58,865	+9.1					
Kansas	14	1,511	−2.3	22,938	−10.5	24	817	+0.5	20,419	−0.3
Kentucky	152	25,806	−3.9	334,888	−14.5					
Louisiana						7	143	−0.7	4,012	−45.5
Maine										
Maryland	*14*	*1,243*	*−2.8*	*18,273*	*−10.0*					
Massachusetts										
Michigan										
Minnesota										
Mississippi										
Missouri	18	1,232	+2.9	28,190	+6.2					
Montana	10	987	+11.1	24,417	−17.5	5	43	+2.4	1,249	−2.5
Nebraska										
New Hampshire										
New Jersey										
New Mexico	13	2,092	+3.1	36,621	−14.2	3	26	−31.6	878	−39.3
Nevada										
New York						4	156	−12.4	4,496	−1.1
North Carolina										
North Dakota										
Ohio	62	12,388	+2.3	163,690	−13.3	5	58	−1.7	921	−8.4
Oklahoma	14	600	−39.4	9,949	−41.3	53	3,646	−4.5	99,569	−8.5
Oregon										
Pennsylvania	386	54,487	−0.8	772,193	−10.3	20	388	+2.4	10,243	−5.8
Rhode Island										
South Carolina										
South Dakota										
Tennessee	16	3,061	−1.7	33,794	−5.8					
Texas						43	8,193	−9.2	298,138	−18.9
Utah	13	2,536	+4.2	72,943	−1.3					
Vermont										
Virginia	26	4,510	−2.3	49,544	−12.3					
Washington	9	1,487	−1.1	34,641	−23.8					
West Virginia	247	40,620	+1.2	556,037	−10.5	7	384	−4.7	9,031	−9.5
Wisconsin										
Wyoming	25	3,387	−0.1	81,902	−23.7	4	135	−6.2	4,224	−3.0

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Public utilities					Hotels				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	121	2,205	−0.2	$46,998	−6.5	25	1,205	−3.2	$12,364	−5.2
Arkansas	*50*	*1,492*	*−0.8*	*40,424*	*−8.1*	*17*	*897*	*−0.4*	*11,312*	*−0.8*
Arizona	64	1,669	+3.2	44,824	−1.3	14	510	+3.4	8,577	+3.6
California	*56*	*46,388*	*−0.8*	*1,440,204*	*−1.5*	257	11,760	−0.6	213,273	−1.5
Colorado	198	6,018	−1.7	166,151	−5.4	31	1,229	−1.7	19,673	−2.0
Connecticut	135	10,887	−0.7	359,119	−1.8	20	1,008	−3.4	14,364	−9.5
Delaware	28	1,086	−6.6	31,506	−5.4	6	271	−0.4	3,745	−0.7
Florida	201	4,535	+0.2	132,672	−4.7	58	2,564	+92.6	35,516	+69.0
Georgia	182	8,120	+6.7	243,925	+4.3	24	1,323	−5.4	13,236	−10.5
Idaho	53	602	−2.0	12,551	−7.3	13	247	+10.3	3,470	−3.6
Illinois	*55*	*67,422*	*−1.5*	*2,104,713*	*−1.3*	[6] *51*	*8,953*	*+0.4*	*162,584*	*−2.8*
Indiana	132	11,252	+0.1	299,091	−2.2	64	2,845	−0.5	36,890	−1.4
Iowa	441	10,680	−0.1	261,992	−4.2	59	2,694	+4.0	29,726	−0.1
Kansas	292	6,642	+2.2	151,442	−3.2	35	933	−4.3	10,557	−2.2
Kentucky	310	7,709	−0.1	186,359	−4.2	32	1,821	(3)	22,642	+3.2
Louisiana	153	4,824	−0.6	116,813	−4.3	20	2,102	−0.7	25,213	−3.3
Maine	174	3,252	−3.5	95,674	−3.6	7	540	+3.8	8,427	+4.3
Maryland	*30*	*8,523*	*−2.0*	*271,698*	*+2.4*	*24*	*1,402*	*−1.2*	*19,362*	*−2.7*
Massachusetts	*139*	*49,310*	*−1.1*	*1,571,441*	*−1.8*	*92*	*5,343*	*−2.6*	*86,147*	*−1.6*
Michigan	421	25,667	+0.3	790,447	−1.6	74	4,879	+3.6	76,161	+1.4
Minnesota	271	13,738	−1.2	387,146	−2.9	63	3,292	−2.5	47,606	−2.4
Mississippi	198	2,405	−0.8	49,959	−9.8	22	662	+1.2	6,054	−0.5
Missouri	214	24,225	−1.4	699,999	−5.7	83	4,845	−2.0	65,007	−4.2
Montana	115	2,659	−6.8	82,964	−13.6	17	274	−2.1	4,661	−4.2
Nebraska	291	6,471	−4.8	176,272	−7.1	36	1,723	−6.1	22,976	−3.7
New Hampshire	145	2,448	−0.9	70,400	−3.8	8	185	−3.1	2,551	+1.4
New Jersey	269	24,431	−0.5	802,966	−3.7	55	3,413	−0.9	52,952	−2.7
New Mexico	53	425	−6.8	9,646	−5.6	9	247	−2.4	3,254	−2.0
Nevada	40	384	(3)	11,968	−2.2	7	109	(3)	1,982	−11.0
New York	*17*	*5,974*	*−1.1*	*214,043*	*−1.3*	151	23,027	−2.4	407,030	−5.4
North Carolina	77	2,102	+0.2	43,355	−5.8	28	1,310	+13.1	14,852	+8.4
North Dakota	171	1,327	+3.5	33,238	−2.1	21	402	−2.0	4,644	−8.0
Ohio	481	32,840	−0.5	895,603	−4.1	163	9,452	−1.1	137,084	−3.8
Oklahoma	233	6,532	−3.4	159,736	−9.3	38	908	−1.1	9,257	−8.3
Oregon	188	6,105	−1.3	174,686	−4.5	43	1,152	−4.9	18,613	−7.9
Pennsylvania	682	55,938	−0.5	1,697,051	−3.1	141	9,739	−0.5	143,258	−2.2
Rhode Island	36	4,013	−0.1	127,187	+0.6	12	243	−1.2	3,748	+8.4
South Carolina	70	1,760	−0.8	43,551	−0.6	15	486	+29.6	4,819	+36.1
South Dakota	127	1,186	−8.4	31,144	−11.6	15	302	−5.3	4,240	−2.4
Tennessee	251	5,408	−0.7	128,474	−5.8	41	2,590	−1.3	26,711	−3.8
Texas	*16*	*7,937*	*−4.4*	*226,637*	*−5.3*	*57*	*3,576*	*+1.0*	*46,776*	*−0.4*
Utah	68	1,981	+0.2	46,195	−4.2	17	565	−6.9	9,136	−1.6
Vermont	125	1,091	+0.3	27,414	−4.0	16	381	−2.3	4,710	−8.9
Virginia	136	6,461	−0.6	167,258	−3.3	28	1,817	−5.9	23,704	−4.2
Washington	206	10,511	+0.2	325,783	−4.3	64	2,297	−(5)	33,603	−3.3
West Virginia	112	6,634	+0.7	180,873	−1.6	18	683	−3.0	8,562	−4.5
Wisconsin	*42*	*11,953*	*−1.9*	*362,807*	*−6.6*	[6] *43*	*1,402*	*−4.4*	----------	----------
Wyoming	47	462	−1.5	11,698	−9.5	10	136	−2.9	2,465	−1.6

[3] No change.
[5] Less than one-tenth of 1 per cent.
[6] Includes restaurants.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN IDENTICAL ESTABLISHMENTS IN DECEMBER, 1931, AND JANUARY, 1932, BY STATES, FOR 11 INDUSTRIAL GROUPS AND TOTAL OF GROUPS COMBINED—Continued

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State	Laundries					Dyeing and cleaning				
	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change	Number of establishments	Number on pay roll January, 1932	Per cent of change	Amount of pay roll (1 week) January, 1932	Per cent of change
Alabama	6	675	−2.9	$8,197	−1.6	5	203	+0.5	$2,631	−0.1
Arkansas	*12*	*367*	*−2.1*	*4,305*	*−2.2*					
Arizona	4	240	+2.6	4,067	+2.0					
California	[1] *61*	*5,150*	*−0.8*	*107,228*	*−2.2*					
Colorado	11	908	−1.6	14,660	−1.4	12	149	−3.2	3,076	−3.9
Connecticut	27	1,391	−0.1	27,231	−1.6	10	263	−5.4	6,742	−4.0
Florida	5	439	+0.7	5,314	+0.9					
Georgia	11	541	−4.2	5,925	+1.8	4	131	−6.4	1,706	−13.4
Illinois	[1] *23*	*1,662*	*−0.1*	*28,652*	*−0.6*					
Indiana	21	1,566	+1.6	23,591	−5.2	6	117	−6.4	2,185	−6.8
Iowa	4	236	−3.7	4,047	−2.8					
Kansas	9	303	−1.9	4,536	−4.0					
Kentucky	21	975	−0.4	13,695	−2.2	6	269	+0.4	4,146	−0.7
Maine	19	350	−1.7	5,477	+2.3					
Maryland	*23*	*1,879*	*−1.0*	*31,407*	*−0.2*	*16*	*428*	*+0.5*	*6,938*	*−4.9*
Massachusetts	*62*	*2,494*	*−3.4*	*47,593*	*−5.5*					
Michigan	27	1,952	−1.1	31,340	+1.4	16	373	−3.1	7,940	−4.7
Minnesota	15	863	−1.8	15,756	−0.2	9	259	−2.3	5,023	−6.1
Mississippi	3	124	+5.1	1,351	+11.5					
Missouri	37	3,032	+2.5	45,631	−2.1	17	449	−6.5	8,418	−6.2
Montana	8	244	−3.2	4,824	−5.3					
Nebraska	10	877	+5.5	14,647	+1.5	4	65	+4.8	1,282	−7.6
New Hampshire	11	235	−2.1	3,970	−1.5					
New Jersey	28	3,099	−1.6	68,969	−1.6	7	326	−5.2	9,197	−2.6
New Mexico	3	107	+4.9	1,714	+0.8					
Nevada	4	61	−12.9	1,541	−1.7					
New York	61	6,923	−1.1	133,799	−1.6	16	621	−2.8	14,923	−1.7
North Carolina	5	280	−9.1	3,393	+10.6					
North Dakota	4	78	−1.3	1,433	−2.8					
Ohio	68	4,587	+0.7	82,419	−0.8	19	1,390	−1.2	26,777	−1.6
Oklahoma	3	328	−8.1	5,010	−7.0					
Oregon	6	357	−0.8	6,578	+1.0	5	52	−3.7	1,238	−4.0
Pennsylvania	51	3,756	−1.9	64,253	−1.9	23	880	−6.7	18,084	−3.6
Rhode Island	18	1,090	−0.7	20,876	−1.4	8	293	−5.5	5,840	−7.0
South Carolina	7	342	−1.2	3,821	−0.4					
South Dakota	3	89	−4.3	1,572	+0.8					
Tennessee	12	758	−1.9	7,801	−3.4	9	205	−6.4	4,129	−9.2
Texas	19	919	−3.3	12,864	−5.5	14	271	−4.2	5,174	−1.3
Utah	7	584	−1.0	9,453	−4.3	5	91	−10.8	1,718	−15.1
Vermont	3	36	−7.7	486	−14.9					
Virginia	11	910	−1.6	12,035	+2.2	17	288	−2.0	4,635	−5.2
Washington	4	109	−6.0	2,345	−3.5	3	31	+3.3	567	−0.4
West Virginia	17	584	−0.2	9,006	+2.3	5	89	−16.0	1,845	+9.8
Wisconsin	[1] *28*	*1,048*	*−1.5*	*17,264*	*−1.9*					

[1] Includes dyeing and cleaning.

Employment and Pay Rolls in January, 1932, in Cities of Over 500,000 Population

IN THE following table are presented the fluctuations in employment and earnings in January, 1932, as compared with December, 1931, in 13 cities of the United States having a population of 500,000 or over. These fluctuations are based on reports received from identical establishments in each of the months considered.

These city tabulations include all establishments reporting in the 15 industrial groups in these 13 cities, and also additional employment information secured from banks, insurance companies, garages,

and other establishments in these 13 cities. Building construction data are not included in these totals, as information is not available for all cities at this time. Decreases in both employment and earnings are shown in 12 of these cities. An increase of 3.1 per cent in employment coupled with a loss of 1 per cent in pay-roll totals is shown in Detroit. This increase is due principally to increased employment in the automobile industry.

CHANGES IN EMPLOYMENT AND PAY ROLL IN 13 CITIES, DECEMBER, 1931, TO JANUARY, 1932

Cities	Number of establishments reporting in both months	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		December, 1931	January, 1932		December, 1931	January, 1932	
New York City	1,819	289,347	267,240	−7.6	$8,281,264	$7,592,373	−8.3
Chicago, Ill	1,790	222,739	217,635	−2.3	6,058,226	5,682,734	−6.2
Philadelphia, Pa	556	117,855	112,133	−4.9	2,889,447	2,644,181	−8.5
Detroit, Mich	392	175,777	181,259	+3.1	4,332,491	4,289,089	−1.0
Los Angeles, Calif	527	54,231	49,384	−8.9	1,352,999	1,231,943	−8.9
Cleveland, Ohio	422	73,487	68,379	−7.0	1,656,030	1,514,565	−8.5
St. Louis, Mo	460	68,375	67,399	−1.4	1,559,680	1,498,761	−3.9
Baltimore, Md	458	53,131	49,557	−6.7	1,117,946	1,028,417	−8.0
Boston, Mass	2,135	78,174	74,254	−5.0	2,151,656	2,014,536	−6.4
Pittsburgh, Pa	260	52,171	47,824	−8.3	1,151,960	1,025,539	−11.0
San Francisco, Calif	1,043	41,722	40,262	−3.5	1,119,949	1,057,244	−5.6
Buffalo, N. Y	224	43,549	43,107	−1.0	1,095,715	1,015,198	−7.3
Milwaukee, Wis	259	40,345	34,838	−13.6	856,709	719,259	−16.0

Employees in Executive Civil Service of the United States, January, 1932

THE table following shows for specified months the number of officers and employees in the executive civil service of the United States Government. The figures are complete except for temporary employees in the field service of the Post Office Department. The number of such employees varies greatly, mainly because of seasonal demands, the principal demand for temporary Post Office employees being during the Christmas mail rush. Their term of service is usually quite brief.

As indicated by the title of this article, the figures do not include the legislative, judicial, Army, or Navy services.

The figures are compiled by the several departments and offices and sent to the United States Civil Service Commission where they are assembled. They are here published by courtesy of the commission and in compliance with the direction of Congress. Data relating to pay rolls have not yet been collected.

Because of the importance of Washington as a Government center, the figures are given for the District of Columbia separately. The District of Columbia figures are included in the grand total for the entire service.

At the end of January, 1932, there were 609,283 employees on the pay rolls of the executive civil service of the United States. Of this number, 581,131 were permanent employees and 28,152 were temporary employees. In the interval between December 31, 1931, and January 31, 1932, there was a gain of 2,915 employees, or 0.48 per cent. Comparing the number on the pay roll on January 31, 1932, with those on the pay roll on the last day of January, 1931, there was a gain of 10,663 or 1.78 per cent. During the month of January,

1932, 12,119 employees were separated from the service because of resignations, termination of appointments, deaths, or other causes, and there were 15,034 new employees hired. This gives a net turnover rate of 1.99 per 100 employees during the month.

The turnover rate for the service as a whole is considerably higher than the turnover rate for the District of Columbia. There were 69,710 employees on the Government pay rolls in the District of Columbia at the end of January, 1932.

EMPLOYEES IN EXECUTIVE CIVIL SERVICE OF THE UNITED STATES, JANUARY, 1931, DECEMBER, 1931, AND JANUARY, 1932

Class	District of Columbia			Entire service		
	January, 1931	December, 1931	January, 1932	January, 1931	December, 1931	January, 1932
Permanent employees	63,309	65,669	66,043	563,480	578,383	581,131
Temporary employees (not including those in field service of the Post Office Department)	7,943	3,766	3,667	35,140	27,985	28,152
Total	71,252	69,435	69,710	598,620	606,368	609,283

Gain or loss	District of Columbia		Entire service	
	Number	Per cent	Number	Per cent
January, 1931, to January, 1932	−1,542	−2.16	+10,663	+1.78
December, 1931, to January, 1932	+275	+.40	+2,915	+.48

Labor turnover	District of Columbia	Entire service
	Number	*Number*
Additions in January, 1932	1,207	15,034
Separations in January, 1932	932	12,119
Monthly turnover, 1932	1.34	1.99

Employment in Building Construction in January, 1932

EMPLOYMENT in building construction decreased 14.9 per cent in January, 1932, as compared with December, 1931, and pay rolls decreased 16.9 per cent during the same period. This information is based on reports received from 6,822 firms engaged in building operations in 43 cities covered by the Federal bureau and 2,501 additional firms in various localities in Pennsylvania, California, Massachusetts, Wisconsin, and the city of Baltimore, Md.

As shown by the following table, these firms reported a combined employment of 77,576 for a week ending near January 15 as compared with 91,131 for a similar period in December. The total pay roll for these employees was $2,063,168 for a week ending near January 15 as compared with $2,481,857 for a similar period in December.

In the 43 cities covered by the Federal bureau, reports were received from 6,822 identical contractors and subcontractors whose total employment for a week ending near January 15 was 50,340 as compared with 59,317 for a similar period in December. This is a decrease of 15.1 per cent, which is practically the same as the decrease for the 9,323 firms engaged on building construction in all localities. Four

cities reported increased employment ranging from 0.3 per cent for Grand Rapids to 14.0 per cent for Nashville. These 6,822 firms reported a combined pay roll of $1,348,383 for a week ending near January 15 as compared with $1,623,386 for a similar period in December. This is a decrease of 16.9 per cent, which is the same percentage of decrease in total pay roll as was reported by the 9,323 firms for all localities. Two cities showed increased pay rolls, the increase for Louisville being 3.5 per cent and for Nashville 11.8 per cent.

The data for the 14 cities in Pennsylvania, based on returns from 1,350 identical firms, show a decrease of 18.5 per cent in employment and 18.6 per cent in pay rolls.

Employment and pay-roll information for California covers 194 identical firms whose combined employment and pay rolls decreased 6.5 and 4.8 per cent, respectively, when January is compared with December. However, there was an increase of 0.3 per cent in the total pay roll for the reporting firms from San Francisco-Oakland.

Decreased employment and pay rolls are also reported for the city of Baltimore and the States of Massachusetts and Wisconsin.

Data concerning the building construction industry appearing in the following table have not been included in the summary table shown at the beginning of this trend of employment article.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, DECEMBER, 1931, AND JANUARY, 1932

Locality	Number of firms reporting	Number on pay roll week ending near—		Per cent of change	Amount of pay roll week ending near—		Per cent of change
		Dec. 15	Jan. 15		Dec. 15	Jan. 15	
Akron	77	456	340	−25.4	$9,982	$7,939	−20.5
Atlanta	131	1,287	1,281	−0.5	21,707	19,944	−8.1
Birmingham	87	598	535	−10.5	10,881	8,665	−20.4
Bridgeport	131	731	553	−24.4	20,217	15,172	−25.0
Charlotte	37	311	281	−9.7	5,974	4,642	−22.3
Cincinnati [1]	496	3,106	2,692	−13.3	90,836	82,286	−9.4
Cleveland	464	2,944	2,628	−10.7	96,959	83,496	−13.9
Dallas	109	815	810	−0.6	17,529	16,113	−8.1
Denver	197	934	939	+0.5	25,492	23,624	−7.3
Des Moines	98	735	583	−20.7	17,012	13,317	−21.7
Detroit	474	4,791	3,820	−20.3	129,567	109,046	−15.8
Duluth	44	221	175	−20.8	4,988	3,377	−32.3
Fort Wayne	110	521	464	−10.9	12,787	10,477	−18.1
Grand Rapids	78	364	365	+0.3	8,426	7,763	−7.9
Hartford	239	1,716	1,323	−22.9	52,226	39,966	−23.5
Houston	95	608	645	+6.1	12,989	12,582	−3.1
Indianapolis	169	1,364	1,027	−24.7	42,186	27,212	−35.5
Jacksonville	55	443	305	−31.2	7,019	5,230	−25.5
Kansas City [2]	219	1,674	1,386	−17.2	55,838	41,893	−25.0
Louisville	122	1,030	1,013	−1.7	21,624	22,389	+3.5
Memphis	102	863	689	−20.2	16,896	12,335	−27.0
Miami	77	1,224	608	−50.3	29,150	16,233	−44.3
Minneapolis	219	1,734	1,463	−15.6	51,383	39,447	−23.2
Nashville	63	808	921	+14.0	14,146	15,814	+11.8
New Haven	200	2,672	2,456	−8.1	97,393	93,892	−3.6
New Orleans	116	1,741	1,337	−23.2	33,412	25,028	−25.1
Norfolk-Portsmouth	82	503	446	−11.3	10,034	9,457	−5.8
Oklahoma City	98	1,293	1,069	−17.3	29,313	28,739	−2.0
Omaha	117	780	552	−29.2	19,908	13,784	−30.8
Portland, Me	77	524	358	−31.7	14,001	9,541	−31.9
Portland, Oreg	200	960	958	−0.2	25,154	24,038	−4.4
Providence	229	2,210	1,933	−12.5	61,297	50,080	−18.3
Richmond	140	1,166	1,054	−9.6	27,896	23,029	−17.4
St. Louis	459	3,104	2,468	−20.5	103,128	81,238	−21.2
St. Paul	121	1,430	943	−34.1	40,887	22,765	−44.3

[1] Includes Covington and Newport, Ky.
[2] Includes both Kansas City, Kans., and Kansas City, Mo.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE BUILDING CONSTRUCTION INDUSTRY IN IDENTICAL FIRMS, DECEMBER, 1931, AND JANUARY, 1932—Continued

Locality	Number of firms reporting	Number on pay roll week ending near—		Per cent of change	Amount of pay roll week ending near—		Per cent of change
		Dec. 15	Jan. 15		Dec. 15	Jan. 15	
Salt Lake City	86	671	498	−25.8	$14,633	$9,266	−36.7
Seattle	198	1,375	1,356	−1.4	37,657	36,363	−3.4
Spokane	34	144	136	−5.6	3,725	3,150	−15.4
Tulsa	51	375	327	−12.8	7,692	7,319	−4.8
Washington, D. C	503	8,854	7,583	−14.4	269,512	225,904	−16.2
Wheeling	53	239	226	−5.4	5,431	5,020	−7.6
Wichita	62	386	314	−18.7	7,865	6,325	−19.6
Wilmington	103	1,612	1,480	−8.2	38,634	34,483	−10.7
Total, 43 cities	6,822	59,317	50,340	−15.1	1,623,386	1,348,383	−16.9
Erie [3]	31	218	130	−40.4	4,820	3,653	−24.2
Philadelphia [3]	671	5,033	4,222	−16.1	136,862	111,074	−18.8
Pittsburgh [3]	286	2,652	2,072	−21.9	89,486	71,944	−19.6
Reading [3]	77	562	519	−7.7	11,653	11,220	−3.7
Scranton [3]	48	276	239	−13.4	7,013	5,939	−15.3
Nine additional cities over 50,000 under 100,000 [3]	237	1,374	1,058	−23.0	27,520	22,021	−20.0
Total, 14 cities	1,350	10,115	8,240	−18.5	277,354	225,851	−18.6
Los Angeles [3]	47	3,345	3,279	−2.0	74,919	72,516	−3.2
San Francisco-Oakland [3]	76	3,923	3,715	−5.3	95,702	96,011	+0.3
California (including all localities) [3]	194	10,168	9,512	−6.5	231,315	220,243	−4.8
Baltimore, Md. [3]	143	1,326	1,270	−4.2	33,383	29,277	−12.3
Massachusetts [3]	749	8,246	6,634	−19.5	269,683	204,057	−24.3
Wisconsin [3]	65	1,959	1,580	−19.3	46,736	35,357	−24.3
Grand total, all localities	9,323	91,131	77,576	−14.9	2,481,857	2,063,168	−16.9

[3] Data supplied by cooperating State bureaus.

Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to December, 1931, on Class I railroads—that is, all roads having operating revenues of $1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the monthly average for 1926 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO DECEMBER, 1931

[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931
January	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3	73.7
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	97.0	73.5
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6

Table 2 shows the total number of employees on the 15th day each of December, 1930, and November and December, 1931, and payroll totals for the entire months.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, DECEMBER, 1930, AND NOVEMBER AND DECEMBER, 1931

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Occupation	Number of employees at middle of month			Total earnings		
	December 15, 1930	November 15, 1931	December 15, 1931	December, 1930	November, 1931	December, 1931
Professional, clerical, and general	239,506	209,224	205,788	$35,480,420	$29,720,407	$29,808,212
Clerks	131,874	113,086	110,640	18,416,619	15,028,441	15,101,063
Stenographers and typists	22,248	19,461	19,244	2,938,400	2,479,268	2,487,425
Maintenance of way and structures	274,479	234,886	217,195	25,481,474	19,495,096	18,339,454
Laborers, extra gang and work train	24,148	18,105	13,789	1,627,868	1,032,633	800,998
Laborers, track and roadway section	141,546	125,159	116,197	9,343,103	7,003,005	6,623,490
Maintenance of equipment and stores	375,160	313,116	310,636	47,968,887	35,620,205	35,934,895
Carmen	78,647	64,788	63,843	11,217,057	8,289,738	8,291,894
Machinists	48,077	42,066	42,319	7,215,944	5,428,597	5,554,186
Skilled trades helpers	82,391	68,295	68,041	8,821,751	6,367,696	6,430,882
Laborers (shops, engine houses, power plants, and stores)	31,558	26,278	25,766	2,998,569	2,292,091	2,326,506
Common laborers (shops, engine houses, power plants, and stores)	40,251	32,674	32,042	2,990,203	2,108,231	2,139,663
Transportation, other than train, engine, and yard	168,939	150,136	146,450	21,537,554	18,218,805	18,453,385
Station agents	28,298	27,105	26,877	4,547,678	4,097,744	4,238,256
Telegraphers, telephoners, and towermen	20,737	18,458	18,185	3,292,425	2,812,695	2,865,381
Truckers (stations, warehouses, and platforms)	25,151	21,632	20,497	2,259,704	1,832,883	1,771,961
Crossing and bridge flagmen and gatemen	19,226	18,663	18,542	1,502,394	1,421,852	1,425,624
Transportation (yardmasters, switch tenders, and hostlers)	19,027	16,417	16,035	3,746,253	3,030,751	3,017,659
Transportation, train and engine	263,359	230,761	223,292	51,181,921	42,561,688	42,008,762
Road conductors	29,707	26,107	25,292	6,939,799	5,892,090	5,861,596
Road brakemen and flagmen	57,720	50,605	48,948	9,505,914	7,988,732	7,804,790
Yard brakemen and yard helpers	44,611	39,878	38,479	7,443,911	6,046,778	5,893,951
Road engineers and motormen	35,344	30,924	29,956	9,242,135	7,786,014	7,733,860
Road firemen and helpers	36,289	31,588	30,650	6,725,785	5,624,313	5,585,455
All employees	1,340,470	1,154,540	1,119,396	185,396,509	148,646,952	147,562,367

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in January, 1932

IT HAS been the custom of the Bureau of Labor Statistics to publish each month the retail prices of food and coal, by cities, and index numbers of individual food articles for the United States for all years back to 1913. Rates of electricity for household use and price per 1,000 cubic feet of gas, by cities, have been published for June and December of each year.

In the interest of economy in the cost of printing, these detailed statistics are eliminated from current publications, only summaries for the United States and limited comparisons being shown. Comparable information with that shown in previous publications is on record in the files of the bureau and available to those desiring to make use of it.

Table 1 shows for the United States retail prices and index numbers of food on January 15, and December 15, 1931, and January 15, 1932. These prices are simple averages of actual selling prices reported monthly by retail dealers in 51 cities. The index numbers are based on the average prices in 1913.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON JANUARY 15 AND DECEMBER 15, 1931, AND JANUARY 15, 1932

[1913=100.0]

Article	Unit	Average retail price on—			Index numbers		
		Jan. 15, 1931	Dec. 15, 1931	Jan. 15, 1932	Jan. 15, 1931	Dec. 15, 1931	Jan. 15, 1932
		Cents	*Cents*	*Cents*			
Sirloin steak	Pound	42.5	36.3	34.9	167.3	142.9	137.4
Round steak	do	37.5	31.3	30.1	168.2	140.4	135.0
Rib roast	do	31.5	26.7	25.7	159.1	134.8	129.8
Chuck roast	do	24.4	19.6	18.5	152.5	122.5	115.6
Plate beef	do	16.7	13.1	12.3	138.0	108.3	101.7
Pork chops	do	29.8	21.8	20.9	141.9	103.8	99.5
Bacon, sliced	do	40.2	30.3	27.4	148.9	112.2	101.5
Ham, sliced	do	50.6	39.7	37.6	188.1	147.6	139.8
Lamb, leg of	do	31.4	24.9	24.1	166.1	131.7	127.5
Hens	do	32.7	28.6	27.9	153.5	134.3	131.0
Salmon, red, canned	do	34.4	29.6	29.4			
Milk, fresh	Quart	13.3	11.6	11.5	149.4	130.3	129.2
Milk, evaporated	14½-oz. can	8.9	8.0	8.0			
Butter	Pound	37.7	36.5	32.3	98.4	95.3	84.3
Oleomargarine (all butter substitutes)	do	23.7	18.8	17.9			
Cheese	do	32.1	26.2	25.5	145.2	118.6	115.4
Lard	do	15.7	11.2	10.1	99.4	70.9	63.9
Vegetable lard substitute	do	23.8	22.0	21.9			
Eggs, strictly fresh	Dozen	36.1	38.5	29.7	104.6	111.6	86.1
Bread	Pound	8.2	7.2	7.1	146.4	128.6	126.8
Flour	do	4.0	3.3	3.3	121.2	100.0	100.0
Corn meal	do	5.1	4.1	4.0	170.0	136.7	133.3
Rolled oats	do	8.5	7.9	7.7			
Corn flakes	8-oz. package	9.3	8.7	8.6			
Wheat cereal	28-oz. package	25.2	23.0	22.8			
Macaroni	Pound	18.2	16.0	15.9			
Rice	do	8.9	7.4	7.4	102.3	85.1	85.1
Beans, navy	do	9.2	6.2	5.8			
Potatoes	do	2.9	1.8	1.7	170.6	105.9	100.0
Onions	do	3.9	5.2	6.6			

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON JANUARY 15 AND DECEMBER 15, 1931, AND JANUARY 15, 1932—Contd.

Article	Unit	Average retail price on—			Index numbers		
		Jan. 15, 1931	Dec. 15, 1931	Jan. 15, 1932	Jan. 15, 1931	Dec. 15, 1931	Jan. 15, 1932
		Cents	*Cents*	*Cents*			
Cabbage	Pound	4.3	3.4	4.1			
Pork and beans	16 oz. can	8.4	8.2	8.4			
Corn, canned	No. 2 can	14.7	11.9	11.5			
Peas, canned	do	15.5	13.5	13.4			
Tomatoes, canned	do	11.2	9.6	9.5			
Sugar	Pound	5.9	5.5	5.4	107.3	100.0	98.2
Tea	do	76.7	75.1	74.1	141.0	138.1	136.2
Coffee	do	37.8	31.5	31.0	126.8	105.7	104.0
Prunes	do	12.9	10.5	10.3			
Raisins	do	11.3	11.5	11.5			
Bananas	Dozen	29.1	24.8	23.8			
Oranges	do	32.5	31.3	29.7			
Weighted food index					132.8	114.3	109.3

Table 2 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years and by months for 1931 and 1932. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, and macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

TABLE 2.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, BY MONTHS, 1931 AND 1932

[Average cost in 1913=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1931: Average for year	135.9	147.0	114.6	1931—Continued.			
January	147.1	159.5	123.6	August	132.0	149.1	111.9
February	144.6	153.4	120.2	September	130.2	147.7	114.3
March	142.4	152.5	120.5	October	129.8	142.7	117.0
April	138.9	151.4	116.5	November	129.1	135.4	114.4
May	137.7	149.3	110.3	December	127.8	129.3	111.4
June	136.3	145.7	108.3	1932:			
July	134.3	147.8	109.6	January	126.3	123.4	106.5

The curve shown in the chart (p. 727) pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

Comparison of Retail Food Costs in 51 Cities

TABLE 3 shows for 39 cities the percentage of increase or decrease in the retail cost of food in the United States in January, 1932, compared with the average cost in the year 1913, in January, 1931, and December, 1931. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes

are based on actual retail prices secured each month from retail dealers and on the average consumption of these articles in each city. The consumption figures which have been used since January, 1921, are given in the Labor Review for March, 1921 (p. 26). Those used for prior dates are given in the Labor Review for November, 1918 (pp. 94 and 95).

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of January schedules were received from 99 per cent of the firms in the 51 cities from which retail prices of food are collected.

Out of about 1,245 food reports 19 were not received—1 each in Charleston, Dallas, Detroit, Jacksonville, Minneapolis, New Orleans, New York, Philadelphia, and San Francisco; 2 each in Milwaukee, Pittsburgh, and Portland (Me.).

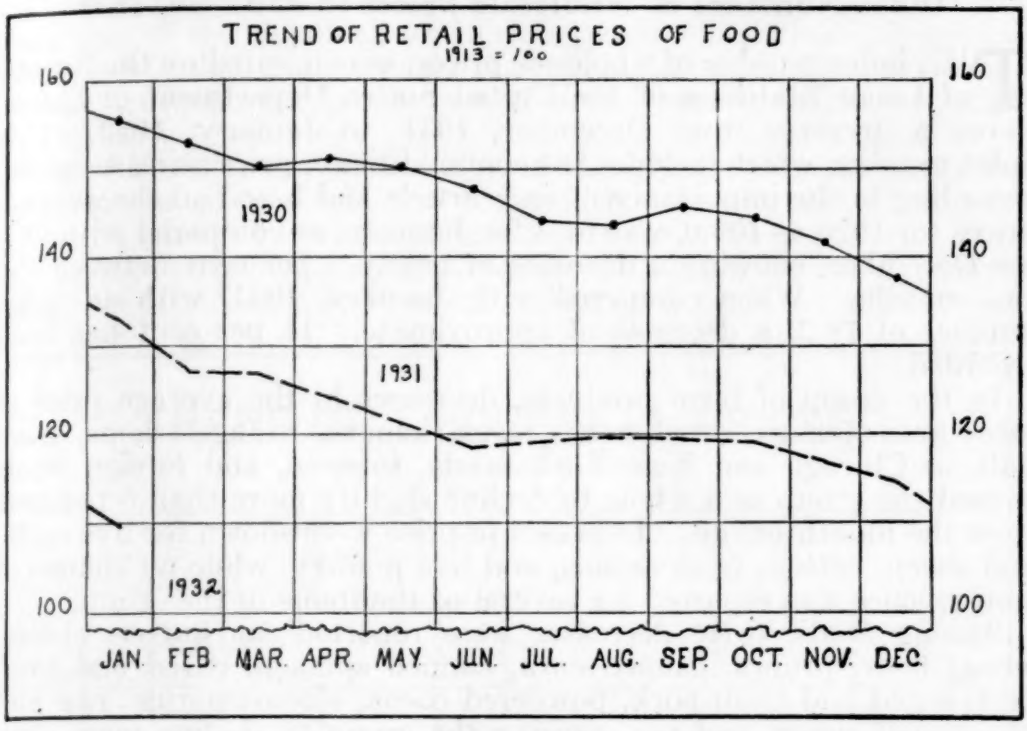
Out of about 350 bread reports 4 were missing, 1 each in Houston, Los Angeles, New Orleans, and Pittsburgh.

A perfect record is shown for the following-named cities: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Buffalo, Butte, Chicago, Cincinnati, Cleveland, Columbus, Denver, Fall River, Indianapolis, Kansas City, Little Rock, Louisville, Manchester, Memphis, Mobile, Newark, New Haven, Norfolk, Omaha, Peoria, Portland (Oreg.), Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Savannah, Scranton, Seattle, Springfield (Ill.), and Washington.

TABLE 3.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN JANUARY, 1932, COMPARED WITH THE COST IN DECEMBER, 1931, JANUARY, 1931, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase January, 1932, compared with 1913	Percentage decrease January, 1932, compared with—		City	Percentage increase January, 1932, compared with 1913	Percentage decrease January, 1932, compared with—	
		January, 1931	December, 1931			January, 1931	December, 1931
United States	9.3	17.7	4.4	Minneapolis	10.4	17.8	3.3
				Mobile		20.9	6.3
Atlanta	6.0	20.5	5.2	Newark	9.4	16.4	4.2
Baltimore	13.9	18.1	3.8	New Haven	18.8	14.3	3.1
Birmingham	6.0	22.4	3.8	New Orleans	9.3	17.4	2.6
Boston	9.4	18.9	7.2				
Bridgeport		13.8	3.9	New York	15.9	15.4	3.0
				Norfolk		16.9	[2] 0.9
Buffalo	7.6	19.7	2.5	Omaha	3.7	17.1	2.3
Butte		9.7	2.8	Peoria		19.0	3.8
Charleston, S. C	14.9	16.8	2.5	Philadelphia	11.6	17.3	8.8
Chicago	18.6	18.2	6.2				
Cincinnati	12.3	20.4	6.2	Pittsburgh	6.2	19.7	5.0
				Portland, Me		14.8	4.3
Cleveland	3.9	18.6	2.6	Portland, Oreg	0.3	12.4	6.3
Columbus		20.4	7.0	Providence	10.2	16.8	7.0
Dallas	5.5	21.3	6.4	Richmond	12.9	19.0	4.8
Denver	[1] 0.9	16.3	6.2				
				Rochester		17.0	4.4
Detroit	4.7	22.2	5.7	St. Louis	10.3	18.0	3.0
Fall River	7.4	16.1	5.3	St. Paul		17.3	3.3
Houston		16.8	2.5	Salt Lake City	[2] 5.6	15.2	6.6
Indianapolis	2.2	20.7	6.0	San Francisco	12.2	15.7	2.5
Jacksonville	1.4	20.6	3.7	Savannah		17.8	3.5
Kansas City	6.7	19.0	6.0	Scranton	15.5	18.0	5.0
Little Rock	[1] 2.0	21.9	5.7	Seattle	7.0	13.3	5.5
Los Angeles	2.7	13.1	4.9	Springfield, Ill		21.7	2.9
				Washington	15.1	19.7	5.8
Louisville	3.1	18.6	4.3				
Manchester	7.3	16.6	3.2	Hawaii:			
Memphis	1.0	19.3	3.7	Honolulu		9.7	1.6
Milwaukee	10.4	14.5	1.2	Other localities		9.6	2.9

[1] Decrease. [2] Increase.



Retail Prices of Coal in January, 1932

RETAIL prices of coal are secured in each of the 51 cities in which retail food prices are obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or bins where an extra handling is necessary.

Average prices for the United States for bituminous coal and for stove and chestnut sizes of Pennsylvania anthracite are computed from the quotations received from retail dealers in all cities where these coals are sold for household use.

The table shows the average prices of coal per ton of 2,000 pounds and index numbers for the United States on January 15, 1932, in comparison with the average prices on January 15, 1931, and December 15, 1931, together with the percentage change in the year and in the month.

AVERAGE RETAIL PRICE PER 2,000 POUNDS OF COAL FOR THE UNITED STATES, AND PER CENT OF CHANGE ON JANUARY 15, 1932, COMPARED WITH JANUARY 15, 1931, AND DECEMBER 15, 1931

Article	Average retail price on—			Per cent of increase (+) or decrease (−) January, 1932, compared with—	
	Jan. 15, 1931	Dec. 15, 1931	Jan. 15, 1932	Jan. 15, 1931	Dec. 15, 1931
Pennsylvania anthracite:					
Stove—					
Average price per 2,000 pounds	$15.12	$15.00	$15.00	−0.8	0.0
Index (1913=100.0)	195.8	194.2	194.2		
Chestnut—					
Average price per 2,000 pounds	$14.88	$14.97	$14.97	+.6	.0
Index (1913=100.0)	188.1	189.1	189.2		
Bituminous:					
Average price per 2,000 pounds	$8.87	$8.19	$8.17	−7.9	−0.2
Index (1913=100.0)	163.2	150.8	150.3		

Index Numbers of Wholesale Prices in January, 1932

THE index number of wholesale prices, as computed by the Bureau of Labor Statistics of the United States Department of Labor, shows a decrease from December, 1931, to January, 1932. This index number, which includes 784 commodities or price series weighted according to the importance of each article and based on the average prices for 1926 as 100.0, was 67.3 for January, as compared with 68.6 for December, showing a decrease of nearly 2 per cent between the two months. When compared with January, 1931, with an index number of 78.2, a decrease of approximately 14 per cent has been recorded.

In the group of farm products, decreases in the average price of most grains, hogs, dried beans, eggs, lemons, oranges, hops, fresh milk in Chicago and New York, seeds, tobacco, and foreign wools caused the group as a whole to decline slightly more than 5 per cent from the month before. Increases in price were shown for live cattle and sheep, cotton, fresh onions, and live poultry, while no change of consequence was reported for several of the items in the group.

Among foods, price decreases were reported for butter, cheese, wheat flour, prunes, canned corn, canned spinach, cured and fresh beef, cured and fresh pork, powdered cocoa, oleomargarine, raw and granulated sugar, and tea, causing the group to decline more than 6 per cent in January when compared with December. Canned peaches and canned pineapple, raisins, mutton, lamb, veal, coffee, black pepper, and table salt averaged higher than in the month before.

The group of hides and leather products decreased approximately one-half of 1 per cent as a whole. Leather, boots and shoes, and other leather products moved downward, while hides and skins showed an upward tendency.

In the group of textile products, all subgroups showed a downward movement in price from December to January. The group as a whole decreased 1½ per cent, with practically all of the items included either showing a downward tendency or no change in average prices.

Bituminous coal increased slightly, with coke and petroleum products declining, while anthracite coal remained at the December level. The group of fuel and lighting materials as a whole decreased slightly more than one-half of 1 per cent.

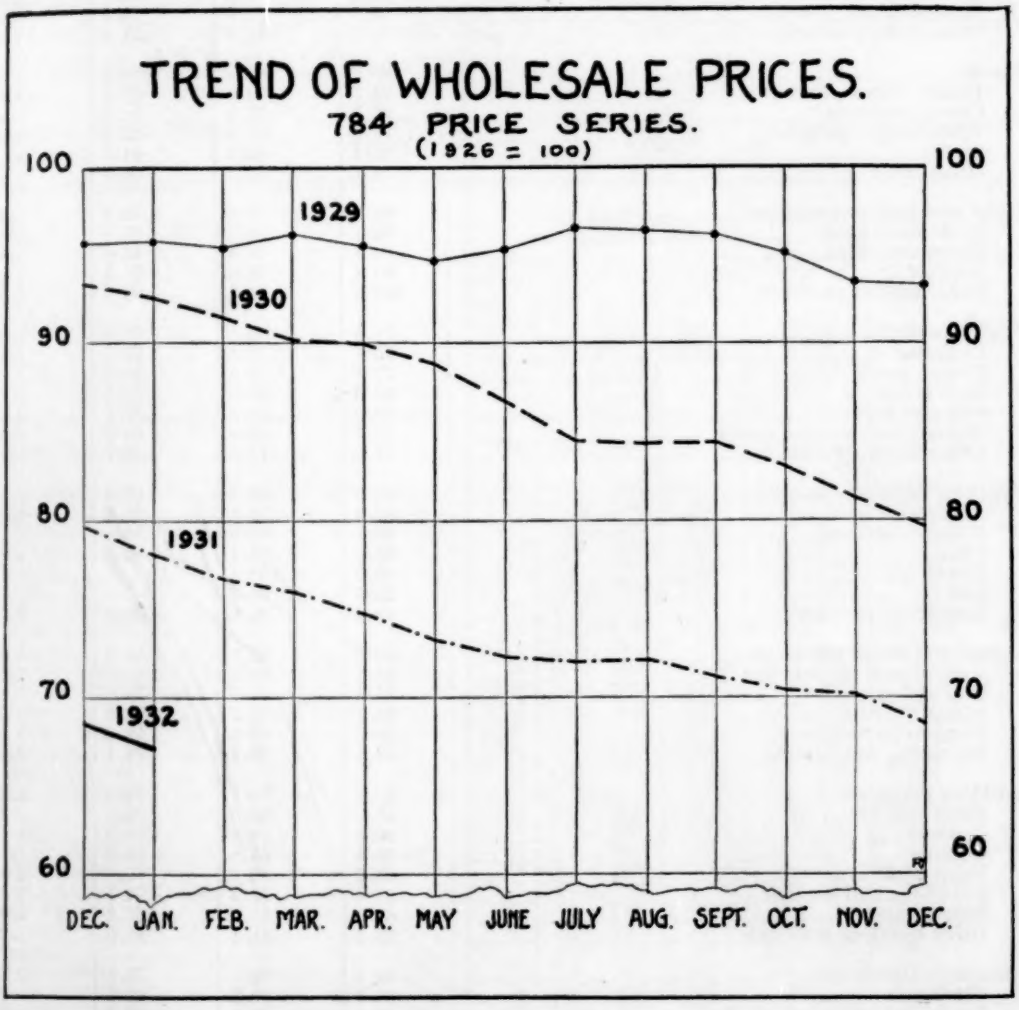
Price fluctuations in the items composing the metals and metal products group were only slight. The group as a whole, however, showed a downward tendency, being influenced by the prices of iron and steel, nonferrous metals, and plumbing and heating items, though agricultural implements showed a steadying in price.

In the group of building materials, cement prices moved slightly upward, while average prices for brick and tile, lumber, paint and paint materials, structural steel, and other building materials, all moved steadily downward, forcing the group to decline approximately 1 per cent.

Mixed fertilizers showed the greatest drop in price of any of the subgroups of the chemicals and drugs group. Chemicals, drugs and pharmaceuticals, and fertilizer materials all showed a downward tendency, though the group as a whole decreased less than one-half of 1 per cent.

Both furniture and furnishings in the group of house-furnishing goods continued to decline in the month. As a whole, this group declined 1 per cent from December to January.

Prices of cattle feed showed a continuous downward trend, whereas the prices of automobile tires and tubes, paper and pulp, and crude



rubber, though moving downward, did not show as sharp a price recession as the other subgroups. Other miscellaneous also showed declining prices. The decrease for this important group of miscellaneous articles was nearly 2 per cent in the month.

Between December and January price decreases took place in 289 instances, increases in 96 instances, while in 399 cases no change occurred.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Commodity groups and subgroups	January, 1931	December, 1931	January, 1932	Purchasing power of the dollar, January, 1932
All commodities	78.2	68.6	67.3	$1.486
Farm products	73.1	55.7	52.8	1.894
Grains	62.4	47.0	46.7	2.141
Livestock and poultry	75.2	51.7	53.4	1.873
Other farm products	75.3	61.2	54.8	1.825
Foods	80.7	69.1	64.7	1.546
Butter, cheese, and milk	83.7	79.8	67.8	1.475
Cereal products	75.7	72.2	71.0	1.408
Fruits and vegetables	76.9	63.5	62.2	1.608
Meats	88.4	63.2	61.9	1.616
Other foods	74.5	67.2	61.9	1.616
Hides and leather products	88.7	79.8	79.3	1.261
Boots and shoes	95.1	89.2	88.8	1.126
Hides and skins	64.4	48.8	49.0	2.041
Leather	90.8	78.6	77.5	1.290
Other leather products	102.3	99.7	98.9	1.011
Textile products	71.3	60.8	59.9	1.669
Clothing	79.1	70.8	70.7	1.414
Cotton goods	73.5	56.4	55.8	1.792
Knit goods	64.8	58.5	55.8	1.792
Silk and rayon	49.0	39.0	37.7	2.653
Woolen and worsted goods	73.7	63.9	63.3	1.580
Other textile products	77.2	71.3	70.7	1.414
Fuel and lighting materials	73.3	68.3	67.9	1.473
Anthracite coal	88.9	94.8	94.8	1.055
Bituminous coal	88.1	83.8	84.4	1.185
Coke	83.8	81.1	80.5	1.242
Electricity	99.9	104.1	(1)	----------
Gas	95.8	98.2	(1)	----------
Petroleum products	50.4	39.6	38.8	2.577
Metals and metal products	86.9	82.2	81.8	1.222
Agricultural implements	94.4	85.5	85.5	1.170
Iron and steel	85.5	81.0	79.9	1.252
Motor vehicles	95.1	95.2	95.3	1.049
Nonferrous metals	69.5	53.8	55.4	1.805
Plumbing and heating	87.4	79.9	74.1	1.350
Building materials	83.8	75.7	74.8	1.337
Brick and tile	87.0	80.0	79.3	1.261
Cement	90.5	74.6	75.2	1.330
Lumber	76.4	65.8	65.6	1.524
Paint materials	83.2	76.6	75.4	1.326
Plumbing and heating	87.4	79.9	74.1	1.350
Structural steel	83.0	81.7	77.3	1.294
Other building materials	87.8	81.5	81.0	1.235
Chemicals and drugs	84.5	76.1	75.7	1.321
Chemicals	88.3	80.8	80.6	1.241
Drugs and pharmaceuticals	65.3	61.0	60.6	1.650
Fertilizer materials	81.4	70.1	69.9	1.431
Mixed fertilizers	90.4	77.1	75.5	1.325
House-furnishing goods	88.3	78.5	77.7	1.287
Furnishings	84.9	76.6	76.1	1.314
Furniture	92.1	80.6	79.5	1.258
Miscellaneous	72.2	66.8	65.6	1.524
Automobile tires and tubes	47.2	40.8	39.7	2.519
Cattle feed	75.0	53.9	53.0	1.887
Paper and pulp	83.6	80.8	78.0	1.282
Rubber, crude	17.1	9.5	9.3	10.799
Other miscellaneous	89.9	85.9	85.2	1.174
Nonagricultural commodities	79.3	71.3	70.3	1.422
All commodities less farm products and foods	79.0	72.3	71.7	1.395

[1] Data not yet available.

Decline in Wholesale Prices in Various Foreign Countries Since 1926

TABLE 1 shows index numbers of wholesale prices in the United States and the more important foreign countries as compiled from official records published in each country. The table shows the peak of prices since January, 1926, together with the month in which the peak occurred. In comparison with these indexes is shown the date and the most recent index number as published. From these indexes has been computed the per cent of decline from the high point since January, 1926, to the latest date for which figures are available. Opposite the country the number of commodities included in such indexes at the present time is given.

TABLE 1.—COMPARISON OF MOST RECENT INDEX NUMBERS OF WHOLESALE PRICES WITH PEAK SINCE JANUARY, 1926

Country	Number of commodities	Peak since January, 1926		Latest available data		Per cent of decrease from peak shown to latest data
		Date	Index number	Date	Index number	
United States	784	Jan., 1926	103.2	Dec. 1931	68.6	33.5
Australia	92	Oct., 1927	1,972.0	Oct., 1931	1,402.0	28.9
Austria	47	June, 1927	142.0	Dec., 1931	112.0	21.1
Belgium	126	July, 1926	876.0	...do	573.0	34.6
Bulgaria	56	Apr., 1929	125.1	Oct., 1931	78.7	37.1
Canada	502	Jan., 1926	103.0	Dec., 1931	70.3	31.7
Chile	(1)	May, 1928	124.1	Oct., 1931	87.5	29.5
China (Shanghai)	155	Aug., 1931	130.3	Dec., 1931	121.8	6.5
Czechoslovakia	69	Aug., 1928	145.6	...do	103.8	28.7
Denmark	118	Oct., 1926	178.0	...do	119.0	33.1
Egypt (Cairo)	26	Mar., 1926	134.0	Nov., 1931	92.0	31.3
Finland	139	Aug., 1928	103.0	Dec., 1931	92.0	10.7
France	45	July, 1926	836.0	Nov., 1931	408.0	51.2
France	126	...do	806.0	Dec., 1931	442.0	45.2
Germany	400	July, 1928	141.6	...do	103.7	26.8
India (Bombay)	44	Jan., 1926	154.0	Oct., 1931	107.0	30.5
India (Calcutta)	72	...do	159.0	Dec., 1931	98.0	38.4
Italy	140	Aug., 1926	632.5	...do	318.9	49.6
Japan	56	Jan., 1926	254.0	Nov., 1931	147.0	42.1
Latvia (Riga)	61	Apr., 1928	133.2	Dec., 1931	80.8	39.3
Netherlands	48	June, 1928	153.0	...do	85.0	44.4
Netherland East Indies	92	Year, 1926	159.0	Oct., 1931	97.0	39.0
New Zealand	180	Jan., 1926	1,677.0	...do	1,380.0	17.7
Norway	95	Mar., 1928	160.0	Dec., 1931	122.0	23.8
Poland	(1)	Apr., 1928	104.7	Nov., 1931	68.2	34.9
South Africa	188	Jan., 1927	1,438.0	Oct., 1931	1,109.0	22.9
Spain	74	Dec., 1926	186.0	...do	175.0	5.9
Sweden	160	Jan., 1926	153.0	Dec., 1931	111.0	27.5
Switzerland	121	...do	152.8	Nov., 1931	106.2	30.5
United Kingdom	150	Nov., 1926	91.7	Dec., 1931	63.7	30.5

[1] Not reported.

Table 2 gives details regarding the index numbers of wholesale prices in the United States and in foreign countries by years from 1926 to 1931, and by months for the year 1931.

TABLE 2.—INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN COUNTRIES

Country	United States	Canada	Austria	Belgium	Czechoslovakia	Denmark	Finland	France	Germany	Italy
Computing agency	Bureau of Labor Statistics	Dominion Bureau of Statistics	Federal Statistical Bureau	Ministry of Industry and Labor	Central Bureau of Statistics	Statistical Department	Central Bureau of Statistics	General Statistical Bureau	Federal Statistical Bureau	Riccardo Bachi
Base period	1926 (100)	1926 (100)	January–June, 1914 (100)	April, 1914 (100)	July, 1914 (100)	1913 (100)	1926 (100)	1913 (100)	1913 (100)	1913 (100)
1926	100.0	100.0	123	744	955	163	100	695	134.4	602.0
1927	95.4	97.7	133	847	979	153	101	642	137.6	495.3
1928	97.7	96.5	130	843	979	153	102	645	140.0	461.6
1929	96.5	95.5	130	851	923	150	98	627	137.2	445.3
1930	86.3	86.9	117	744	[1] 118.5	130	90	554	124.6	383.0
1931	71.1	72.6	-------	-------	-------	114	-------	-------	110.9	-------
1931										
January	77.0	76.7	105	661	[1] 110.0	118	86	541	115.2	341.7
February	75.5	76.0	107	658	[1] 108.9	117	86	538	114.0	338.1
March	74.5	75.1	107	660	[1] 108.8	116	86	539	113.9	339.3
April	73.3	74.4	108	652	[1] 110.5	115	85	540	113.7	337.0
May	71.3	73.0	107	640	[1] 110.3	113	84	520	113.3	331.7
June	70.0	72.2	110	642	[1] 108.7	110	83	518	112.3	326.5
July	70.0	71.7	114	635	[1] 112.1	110	82	500	111.7	324.3
August	70.2	70.9	110	616	[1] 107.8	109	81	488	110.2	321.6
September	69.1	70.0	108	597	[1] 105.2	109	79	473	108.6	319.1
October	68.4	70.4	109	591	[1] 104.6	113	82	457	107.1	322.2
November	68.3	70.6	112	584	[1] 104.3	117	87	447	106.6	320.4
December	66.3	70.3	112	573	[1] 103.8	119	92	442	103.7	318.9

Country	Netherlands	Norway [2]	Spain	Sweden	Switzerland	United Kingdom	Australia	New Zealand	South Africa	Japan	China	India
Computing agency	Central Bureau of Statistics	Central Bureau of Statistics	Ministry of Labor and Prevision	Chamber of Commerce	Federal Labor Department	Board of Trade	Bureau of Census and Statistics	Census and Statistics Office	Office of Census and Statistics	Bank of Japan, Tokyo	National Tariff Commission, Shanghai	Department, etc.[3], Calcutta
Base period	1913 (100)	1913 (100)	1913 (100)	1913 (100)	July, 1914 (100)	1924 (100)	1911 (1000)	1909–13 (1000)	1910 (1000)	October, 1900 (100)	1926 (100)	July, 1914 (100)
1926	145	-------	181	149	145	89.1	1832	1620	1387	237	100.0	148
1927	148	-------	172	146	142	85.2	1817	1541	1395	225	104.4	148
1928	149	157	168	148	145	84.4	1792	1555	1354	226	101.7	145
1929	142	149	171	140	141	82.1	1803	1552	1305	220	104.5	141
1930	117	137	172	122	126	71.9	1596	1511	1155	181	114.8	116
1931	-------	-------	-------	-------	-------	62.6	-------	-------	-------	153	-------	-------
1931												
January	105	128	173	115	115	64.3	1454	1476	1148	159	119.7	98
February	104	126	175	114	115	63.9	1448	1442	-------	158	127.4	99
March	103	124	174	113	114	63.7	1456	1433	-------	158	126.1	100
April	102	123	172	112	112	63.6	1447	1417	1115	158	126.2	98
May	102	121	169	111	111	62.8	1440	1400	-------	154	127.5	97
June	100	120	169	110	110	62.1	1425	1394	-------	151	129.2	93
July	97	120	170	110	109	61.5	1428	1378	1104	153	127.4	93
August	94	120	177	109	108	59.9	1399	1382	-------	152	130.3	92
September	91	117	178	107	106	59.7	1391	1382	-------	150	129.2	91
October	89	119	175	108	106	62.8	1402	1386	1109	147	126.9	96
November	89	119	-------	110	106	64.0	-------	1384	-------	147	124.8	97
December	85	122	-------	111	-------	63.7	-------	-------	-------	151	121.8	98

[1] In gold. [2] Revised figures. [3] Department of Commercial Intelligence and Statistics.

COST OF LIVING

Decline in Cost of Living and Food in Various Countries Since 1926

THE following table shows index numbers of the total cost of living and the cost of food in the United States and in the more important foreign countries, as compiled from official records published in each country. The table shows the peak of prices since January, 1926, together with the month in which the peak occurred. In comparison with these indexes is shown the date and the most recent index number as published. From these indexes has been computed the per cent of decline which has occurred from the peak since January, 1926, to the latest available data shown. In the column opposite the country the number of localities included in these indexes at the present time is given.

COMPARISON OF MOST RECENT INDEX NUMBERS OF COST OF LIVING AND OF FOOD WITH PEAK SINCE JANUARY, 1926

Country	Localities	Peak since January, 1926		Latest available data		Per cent of decrease shown from peak to latest data
		Date	Index	Date	Index	
United States:						
Cost of living	32	Dec., 1926	175.6	Dec., 1931	145.8	17.0
Food	51	Jan., 1926	164.3	...do	114.3	30.4
United Kingdom:						
Cost of living	630	Dec., 1926	179.0	...do	148.0	17.3
Food	630	Jan., 1926	171.0	...do	132.0	22.8
Australia:						
Cost of living	30	Nov., 1929	1803.0	May, 1931	1487.0	17.5
Food	30	Oct., 1929	1076.0	Oct., 1931	805.0	25.2
Austria:						
Cost of living	Vienna.	Aug., 1930	113.0	Dec., 1931	108.0	4.4
Food	Vienna.	Aug., 1929	124.0	...do	110.0	11.3
Belgium: [1]						
Cost of living	59	Feb., 1930	237.7	Nov., 1931	198.0	16.7
Food	59	Oct., 1929	229.1	...do	167.9	26.7
Canada:						
Cost of living	69	Feb., 1930	160.0	Dec., 1931	135.0	15.6
Food	69	Jan., 1930	162.0	...do	107.0	34.0
China:						
Cost of living	Shanghai.	Feb., 1931	136.0	...do	121.2	10.9
Food	Shanghai.	July 1930	130.0	...do	97.0	25.4
Czechoslovakia:						
Cost of living	Prague.	Aug., 1928	112.0	...do	100.6	10.2
Food	Prague.	June, 1927	128.3	Nov., 1931	100.6	21.6
Denmark:						
Cost of living	100	Jan., 1926	194.0	Oct., 1931	154.0	20.6
Food	100	...do	177.0	...do	119.0	32.8
Finland:						
Cost of living	21	Nov., 1928	1262.0	...do	1013.0	19.7
Food	21	...do	1194.0	...do	848.0	29.0
France:						
Cost of living	Paris.	Dec., 1930	597.0	Sept., 1931	565.0	5.4
Food	Paris.	June, 1931	642.0	...do	607.0	5.5
Germany:						
Cost of living	72	Mar., 1929	156.5	Dec., 1931	130.4	16.7
Food	72	...do	159.3	Nov., 1931	121.8	23.5
India:						
Cost of living	Bombay.	Aug., 1927	157.0	Oct., 1931	108.0	31.2
Food	Bombay.	...do	155.0	...do	100.0	35.5

[1] Budget of workingman's family spending 20 to 30 francs per consumption unit per 15 days.

COMPARISON OF MOST RECENT INDEX NUMBERS OF COST OF LIVING AND OF FOOD WITH PEAK SINCE JANUARY, 1926—Continued

Country	Localities	Peak since January, 1926		Latest available data		Per cent of decrease shown from peak to latest data
		Date	Index	Date	Index	
Ireland:						
Cost of living	105	Oct., 1926	185.0	Nov., 1931	165.0	10.8
Food	105	Jan., 1926	187.0	...do	155.0	17.1
Italy:						
Cost of living	Milan.	Oct., 1926	671.8	...do	473.9	29.5
Food	Milan.	Jan., 1926	680.9	...do	436.8	35.8
Netherlands:						
Cost of living	Amsterd.	June, 1926	170.9	Sept., 1931	151.2	11.5
Food	Amsterd.	June, 1928	169.4	...do	136.9	19.2
New Zealand:						
Cost of living	25	Year 1926	1010.0	Nov., 1931	893.0	11.6
Food	25	...do	1026.0	...do	832.0	18.9
Norway:						
Cost of living	31	Jan., 1926	234.0	Oct., 1931	165.0	29.5
Food	31	...do	216.0	...do	136.0	37.0
Poland:						
Cost of living	Warsaw.	Feb., 1929	127.7	Nov., 1931	102.9	19.4
Food	Warsaw.	...do	153.0	...do	101.3	33.8
South Africa:						
Cost of living	9	May, 1928	1326.0	Oct., 1931	1219.0	8.1
Food	9	May, 1927	1206.0	...do	1026.0	14.9
Sweden:						
Cost of living	49	Jan., 1926	174.0	...do	158.0	9.2
Food	49	...do	163.0	...do	128.0	21.5
Switzerland:						
Cost of living	34	...do	166.0	Nov., 1931	147.0	11.4
Food	34	...do	165.0	...do	137.0	17.0

IMMIGRATION AND EMIGRATION

Statistics of Immigration for December and Year, 1931

By J. J. Kunna, Chief Statistician United States Bureau of Immigration

THE statistical review for December last shows that 10,728 aliens were admitted to the United States, of whom 2,642 were immigrants and 8,086 were nonimmigrants. The outward movement of aliens this month totaled 28,097, less than two-fifths (10,727) being classed as emigrants; the remaining 17,370 were nonemigrants leaving after a short stay in this country or going abroad for a temporary visit. In this month the departures exceeded the arrivals by 17,369, the largest so far for any one month.

The semiannual period ended December 31, 1931, witnessed the entry of 106,630 aliens (21,735 immigrants and 84,895 nonimmigrants) and the departure of 170,622 (58,604 emigrants and 112,018 nonemigrants), resulting in a net decrease in the alien population of 63,992. This is in contrast with net increases of 20,245 for the corresponding period of 1930, of 104,050 for 1929, of 108,767 for 1928, of 119,468 for 1927, and of 151,938 for 1926.

Immigration to the United States during the calendar year 1931 was drastically reduced as the result of the strict enforcement of the "likely to become a public charge" provision of the immigration laws. The number of immigrants dropped from 180,251 in 1930 to 43,353 in 1931, a decrease of 136,898, or 75.9 per cent. European immigration declined from 117,608 to 25,825, or 78 per cent; Canadian immigration from 41,339 to 9,462, or 77.1 per cent; Mexican immigration from 6,381 to 2,147, or 66.4 per cent; and that from other countries, 14,923 to 5,919, or 60.3 per cent. The largest number of immigrants admitted since the present quota law became effective on July 1, 1924, was during the calendar year 1926 when the influx reached 336,295. Of this number, 165,171 came from Europe, 93,468 from Canada, 61,007 from Mexico, and 16,649 from other countries. The outward movement of aliens during the calendar year 1926 was 73,179; this meant that about 25 emigrants left for permanent residence in a foreign country for every 100 immigrants or newcomers for permanent residence in the United States. In the calendar year just ended, 89,570 emigrants departed—about 207 leaving for every 100 immigrants admitted. This exodus in 1931 was the largest since 1922, the emigration that year exceeding 100,000.

In addition to the 89,570 emigrants leaving during 1931, which is an increase of 36,640, or 69.2 per cent, over the preceding year, there were 28,147 American citizens who left for intended future permanent residence in a foreign country. This class of departures was also larger than the year before, the increase being 9,193, or 48.5 per cent, over the number for 1930.

Less than 8 per cent of the aliens admitted during the six months from July to December last were of the class charged to the quota under the immigration act of 1924, 7,709 being recorded as quota immigrants. The largest number came from Great Britain and Northern Ireland, 1,444 quota immigrants giving these countries as their place of birth, while 1,222 were born in Germany, 953 in Italy, and 3,450 in Poland, Irish Free State, Scandinavia, and other European countries. Quota immigrants born in Asia numbered 350; in Africa,

Australia, and other Pacific, 184; and in the quota regions of the Western Hemisphere, 106. The returning residents admitted during the same six months numbered 44,081 and visitors for business or pleasure 23,153. Other principal classes under the act of 1924 included 15,879 aliens in transit, 6,048 nonquota immigrants admitted as natives of independent countries of the Western Hemisphere, 5,264 aliens who entered as husbands, wives, or children under 21 years of age, of United States citizens, and 1,078 students. Compared with the corresponding six months of the previous year, there was a smaller number of all these classes admitted. The quota immigrants decreased 36,819; returning residents, 16,514; natives of nonquota countries, 10,631; visitors, 9,012; husbands, wives, and children, 6,049; and transits, 483.

Immigration during the six months ended December 31, 1931, compared with the corresponding period a year ago, shows a decrease from European countries of 36,084, or 74.8 per cent, the number of immigrant aliens from that source dropping from 48,269 to 12,185. Immigration from Germany declined from 8,735 to 1,625, Great Britain from 7,768 to 1,499, Italy from 8,868 to 3,344, and Irish Free State from 5,781 to 341. A little over one-half of the Europeans came from these four countries. The number of newcomers from Canada also shows a decline from 17,521 to 5,296, or 69.8 per cent, while the number from Mexico dropped from 2,267 to 1,081. A much larger decrease in immigration is revealed in comparing the influx during the last six months with that for a like period two years ago, when 78,099 immigrants came from Europe, 39,684 from Canada, and 8,589 from Mexico. This total for Europe seems small, however, when compared with the 635,140 European immigrants coming to the United States in the half year from July to December, 1913.

The number of persons debarred from entering the United States during the six months from July to December, 1931, was 3,966, of whom 2,709 were males and 1,257 females. At New York, the port of entry for 81 per cent of the aliens landing at the seaports, 71,606 aliens sought admission in the said period; of these, 214 were debarred, or 3 per 1,000, and practically all were males. During the same six months 265 aliens were debarred at the other seaports and 3,487 at points along the international land borders. The principal cause for debarment at all ports continues to be failure to present a proper immigration visa under the immigration act of 1924. The principal races among these debarred aliens were the English (729), French (693), Mexican (443), Scotch (388), and Irish (339).

Deportations continue to increase, 9,234 aliens having been deported from the United States during the last six months, as compared with 8,508 and 8,309, respectively, for the corresponding periods of 1930 and 1929. Over 40 per cent, or 3,792 of the 9,234 deportees for the half year ended December 31, 1931, went to Mexico, mostly Mexican departures via the southern land border; 3,256 were sent to European countries, principally Great Britain (436), Italy (416), and Germany (298); while 1,256 were sent to Canada, 424 to China, and 506 to other countries. Entering without proper visa (surreptitious entries) was by far the principal cause for deportation, 3,804 aliens having been deported for this reason; 1,528 had remained here longer than permitted; 928 were of the criminal, and 486 of the immoral classes; 687 were adults unable to read at time of entry; 576 had previously been deported or debarred; 481 were mentally or physically defective; 245 (all Chinese) had violated the Chinese exclusion act;

and the remaining 499 were contract laborers, public charges, and miscellaneous classes.

During the six months from July to December last, 1,690 indigent aliens were returned to their native land at their own request. Of this number, 645 went to Great Britain, 197 to Italy, 140 to Germany, 129 to Ireland, and 413 to Scandinavia and other Europe; 125 were returned to Mexico, and 41 to Canada, the West Indies, and other countries.

Under the terms of an act of Congress approved March 2, 1929, legalizing residence in the United States of aliens who entered without proper inspection prior to June 3, 1921, when the first quota law went into effect, and who had resided here continuously since such entry, 31,734 aliens were registered. The number for the fiscal year 1930 was 8,098; for 1931 it was 16,242; and for the six months from July to December last, 7,394. The examinations in cases of this kind must determine whether the following facts exist: (1) That the applicant is an alien not ineligible to citizenship; (2) that there is no record of admission for permanent residence; (3) that he entered the United States prior to June 3, 1921; (4) that he has resided in the United States continuously since such entry; (5) that he is a person of good moral character; and (6) that he is not subject to deportation.

Of the 31,734 aliens registered during the said two and one-half years, 1,785 were born in Germany, 1,726 in Great Britain, 1,423 in Greece, 896 in Ireland, 2,296 in Italy, 3,825 in Poland, 1,812 in Scandinavia, and 7,836 in other European countries. Natives of Canada numbered 5,130; of Mexico, 3,567; and of other countries, 1,438. The vast majority of these were seamen at time of entry.

The statistics also show that in 4,966 cases registration was denied. The denials were unfavorable to 1,813 aliens, including 1,208 who failed to establish continuous residence, 552 were not of good moral character, 40 were subject to deportation, and 13 were ineligible to citizenship. In the cases of 2,482 applicants for registration, record of permanent admission was found, 519 failed to appear for examination, 49 were found to be American citizens, 45 had left the country without awaiting final action, and 58 had died before final action was taken.

INWARD AND OUTWARD PASSENGER MOVEMENT, JULY TO DECEMBER, 1931

Period	Inward					Aliens debarred from entering [1]	Outward					Aliens deported after entering [2]
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
1931												
July	3,174	12,361	15,535	30,944	46,479	761	7,428	20,450	27,878	46,961	74,839	1,681
August	4,090	16,580	20,670	59,372	80,042	657	9,541	23,009	32,550	65,895	98,445	1,584
September	5,017	20,940	25,957	62,581	88,538	684	8,733	20,393	29,126	42,247	71,373	1,446
October	3,913	17,096	21,009	32,427	53,436	806	10,857	16,525	27,382	35,016	62,398	1,663
November	2,899	9,832	12,731	16,823	29,554	573	11,318	14,271	25,589	23,224	48,813	1,524
December	2,642	8,086	10,728	16,932	27,660	485	10,727	17,370	28,097	24,351	52,448	1,336
Total	21,735	84,895	106,630	219,079	325,709	3,966	58,604	112,018	170,622	237,694	408,316	9,234

[1] These aliens are not included among arrivals, as they were not permitted to enter the United States.
[2] These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

BIBLIOGRAPHY

Public Old-Age Pensions in the United States: References, 1929 to 1931[1]

Compiled by EDNA L. STONE, UNITED STATES DEPARTMENT OF LABOR LIBRARY

General Discussion

Books and Pamphlets

AMERICAN FEDERATION OF LABOR.
Report of the proceedings of the 49th–50th annual convention, 1929–1930. Washington, 1929–30. 2 vols.

1929: Report of executive council recommending State old-age pension legislation, pp. 48–51; Debated and adopted, pp. 258–263.

1930: Old age pensions: pp. 115, 116, 338.

See also Report of executive council, 1931, pp. 101, 102. For text of standard bill adopted by the council see American Federation of Labor Weekly News Service, November 28, 1931.

DEUTSCH FOUNDATION CONFERENCE, *Chicago University*, 1930.
The Care of the Aged; Proceedings . . . edited by I. M. Rubinow. Chicago, University of Chicago Press [1931]. 144 pp. (Social service monographs, No. 14.)

PARTIAL CONTENTS: Facing old age, by A. Epstein. The old-age security act of the State of New York, by S. C. Mastick. Wisconsin's experience with the old-age pension law, by B. Glassberg. Pensions as a part of a social insurance program, by John A. Lapp. Digest of State laws on old-age security.

ECKER, FREDERICK H.
Statement . . . before the committee to investigate security against old-age want in New York State. New York, [Metropolitan Life Insurance Co.], 1929. 47 pp.

Discusses the cost to the State of proposed legislation.

EPSTEIN, ABRAHAM.
Old-age security. New York City, 1929. 36 pp. (League for Industrial Democracy publications, No. 18.)

FRATERNAL ORDER OF EAGLES.
Old-age pensions, answers to objections advanced against pensions for the needy aged. [South Bend? Ind., 1930.]

Reprinted in "Old age pensions. Hearing before . . . the Committee on Pensions, U. S. Senate, February 24, 1931," pp. 149–155.

See also files of Eagle Magazine for campaign of the Order for old-age pensions.

KIMBALL, INGALLS.
Retirement plans. Addresses by Ingalls Kimball and John G. Lonsdale. Washington, D. C., Chamber of Commerce of the United States [1930]. 14 pp.

Discussion of recent tendencies in legislation.

METROPOLITAN LIFE INSURANCE CO.
Old-age dependency; some existing governmental plans for its relief or prevention. [New York, 1931.] 23 pp.

In the United States, pp. 20–23.

NATIONAL ASSOCIATION OF MANUFACTURERS.
Public old-age pensions. New York City, 1930. 87 pp.

Includes summary of arguments against old-age pensions by J. A. Emery and Noel Sargent before the Committee on Labor of the U. S. House of Representatives, February, 1930.

---

[1] Supplementary to "Public old-age pensions in the United States: A list of references," in Monthly Labor Review, May, 1929, v. 28, pp. 1161–1175.

NATIONAL CIVIC FEDERATION. *Industrial Welfare Department.*
State old-age pensions. Constructive proposals for prevention and relief of destitution in old-age. New York City, 1929. 15 pp.
Reprinted in the Monitor (Associated Industries of New York State), March, 1929.

NATIONAL CONFERENCE ON OLD AGE SECURITY. *2d, New York,* 1929.
Old-age security. Report of proceedings of second national conference, April 26, 1929. New York, American Association for Old Age Security [1929]. 87 pp.
PARTIAL CONTENTS: Old-age hazards of women, by Lucille Eaves. The aged in Baltimore, by Elinor Pancoast. The aged in New York, by Luther Gulick. The Canadian pension law, by D. Jamieson. Since California began to pension its aged, by Esther De Turbeville. How Utah pensions its aged, by J. H. Paul. The New York old-age security law, by Charles Johnson. The Wisconsin pension law, by Benjamin Glassberg.
Summary in Old Age Security Herald, May, 1930.

—— *3d, New York,* 1930.
Old-age security progress. Report of proceedings of third national conference, April 25, 1930. New York, American Association for Old Age Security [1930]. 90 pp.
PARTIAL CONTENTS: Industrial and trade-union pensions, by M. W. Latimer. The challenge of old age, by E. L. Israel. Achievements of the British pension system, by E. M. Burns. Old-age security progress in the United States, by Abraham Epstein. The miners' need of old-age security, by Thomas Kennedy. The place of old-age invalidity benefits in a system of social insurance, by Royal Meeker.
Summary in Monthly Labor Review, June, 1929, pp. 310–312.

NATIONAL INDUSTRIAL CONFERENCE BOARD.
The support of the aged; a review of conditions and proposals. New York, 1931. 65 pp.
Old-age pension and relief laws in the United States, 1930; Attitude of employers toward old-age pension legislation; pp. 58–65.

NEW YORK (State). *Commission on Old Age Security.*
Old-age security. Report, February 17, 1930. Albany, 1930. 692 pp. (Legislative document (1930) No. 67.)
Seabury C. Mastick, chairman.
Discusses old-age assistance legislation in other States, experience under American legislation, reports of commissions in other States.

SOCIAL WORK YEAR BOOK, 1929. New York, Russell Sage Foundation, 1930. 600 pp.
"Old-age pensions," by J. B. Andrews, p. 300.

STONE, EDNA L., *comp.*
Public old-age pensions in the United States: A list of references. [Washington, 1929.] Pp. 247–261.
Reprinted from the Monthly Labor Review, May, 1929.

UNITED STATES. *Bureau of Labor Statistics.*
Care of aged persons in the United States. Washington, 1929. 305 pp. (Bul. No. 489.)
Prepared by Florence E. Parker. "Public pensions for aged dependent citizens," pp. 68–80.

—— —— Handbook of labor statistics, 1929–1931. Washington, 1929–1931. 2 vols. (Buls. No. 491, 541.)
Contain data on old-age pensions and relief, reprinted from issues of Monthly Labor Review.

—— —— Labor legislation, 1928–1930. Washington, 1929–1931. 3 vols. (Buls. No. 486, 528, 552.)
Contains summaries of State old-age pension laws.

WILLIAMSON, W. RULON.
State old-age pensions in the United States.
(*In* Casualty Actuarial Society, Proceedings, v. 17, pt. 1, pp. 10–21.)
Reprinted in Industrial Relations, May, 1931, v. 2, pp. 170–173, and in Journal of American Insurance, March, 1931.

Articles in Periodicals

ANDREWS, JOHN B.
Old-age pensions; their basis in social needs.
American Labor Legislation Review, December, 1929, v. 19, pp. 356–358.
From his testimony before the New York Commission on Old Age Security.

A BRIGHTER OUTLOOK FOR THE AGED.
Review of Reviews, May, 1930, v. 81, pp. 126–128.

THE CASE FOR OLD-AGE PENSIONS.
Review of Reviews, August, 1931, v. 84, pp. 90–92.

COWDRICK, EDWARD S.
Shall the State pension the aged?
Nation's Business, June, 1930, v. 18, pp. 54–58, 182.

CROWTHER, SAMUEL.
The need for old-age pensions.
Forbes' Magazine, v. 25, April 15, May 1, 15, June 1, 15, 1930.
Reply by A. Epstein under title "Sage Forbes on a rampage," in Old Age Security Herald, June, 1930.

DIAMOND, HERBERT M.
What do you mean—case work?
Survey, July 15, 1930, v. 64, p. 348.
Reply to arguments of National Association of Manufacturers against old-age pensions.

EPSTEIN, ABRAHAM.
After 65—what?
Woman's Press, January, 1930, v. 24, p. 45.

—— Facing old age.
Commonweal, December 11, 1929, v. 11, pp. 163–165.

—— Freedom for the aged; a survey of old-age pension systems at home and abroad.
New Republic, April 23, 1930, v. 62, pp. 261–263.

—— Have old-age pensions proved successful in the United States?
Old Age Security Herald, September–October, 1931, v. 5, No. 9–10, pp. 1–8.

—— National Manufacturers' Association abandons "moral" issue. Appeals for money to fight social insurance.
Old Age Security Herald, July, 1930, v. 4, No. 7, pp. 3, 4.

—— Old-age security—a national issue.
World Tomorrow, October, 1929, v. 12, pp. 418–420.

FEDERAL AID TO AGED POOR URGED AT WASHINGTON, D. C. CONFERENCE.
Old Age Security Herald, February, 1930, v. 4, No. 2, p. 2.

FILLMAN, JESSE R.
Old-age pension legislation.
American Bar Association Journal, July, 1931, v. 17, pp. 438–440.
Analysis of State laws, with bibliographical notes and citations to cases.

FISH, HAMILTON, *jr.*
The challenge of the aged.
North American Review, January, 1930, v. 229, pp. 93–96.

FITCH, EDWIN M.
Legislative gains for old-age pensions [in 1931].
American Labor Legislation Review, June, 1931, v. 21, pp. 258–260.

GALLOWAY, GEORGE.
Public old-age pensions.
Editorial Research Reports, August 23, 1930, v. 3, No. 8, pp. 576–594.

GIFFORD, WALTER S.
Pensions, charity and old age.
Atlantic Monthly, February, 1930, v. 145, pp. 259–265.
State old-age pensions not consistent with the American system of social work. Reply by Alice Hamilton in the Atlantic Monthly for May, 1930, under title: "State pensions or charity?"

GILL, A. CLOYD.
Poor-relief laws make paupers. Problem of old-age pensions and charitable relief is one for banking and industry, not for politics.
American Bankers Association Journal, March, 1931, v. 23, pp. 759–761.

HARRINGTON, JOHN W.
Forward—the old-age pension.
Burroughs Clearing House, January, 1931, v. 15, pp. 16–18, 41.
"Reviewing its adoption in 12 States in relation to the question of the efficacy of thrift education."

HAYES, CARLTON J. H.
America and the aged.
Commonweal, December 18, 1929, v. 11, pp. 187–189.
Rejoinders by P. T. Sherman and others in the issues of January 29, February 19 and 26, 1930.

HOW EXECUTIVES OF LEADING LIFE INSURANCE COMPANIES VIEW OLD-AGE PENSION PLANS.
Weekly Underwriter, April 5, 1930, v. 122, pp. 845–847, 878, 879.

MCGRADY, EDWARD F.
Old-age pensions.
American Federationist, May, 1930, v. 37, pp. 544–547.
A part of his testimony before the U. S. House Committee on Labor, February, 1930.

MULLINS, HELENE.
The pension.
Commonweal, October 14, 1931, v. 14, pp. 572–574.
A story based on experience in administering old-age pensions.

OLD AGE SECURITY HERALD, Monthly organ of American Association for Old Age Security. v. 4–5; 1929–1931. New York, 1929–31.
Formerly Bulletin of the American Association for Old Age Security (1927–1929). Reviews the progress of the movement in all issues.

PLUCKING THE GOOSE THAT LAYS GOLDEN EGGS. Old-age pensions as an added burden to productive industry.
American Industries (National Association of Manufacturers), February, 1930, v. 30, No. 7, pp. 3–8.

THE PROBLEM OF SECURITY IN OLD AGE.
(*In* Federal Council of the Churches of Christ in America, Information Service, November 2, 1929, v. 8, No. 39.)

RUBINOW, ISAAC M.
The modern problem of the care of the aged.
Social Service Review, June, 1930, v. 4, pp. 169–182.
Address before the Deutsch Foundation conference on the care of the aged, March, 1930.

—— Old-age pensions—pro and con.
Bulletin of the Welfare Council of New York, April, 1929, v. 2, No. 6, p. 5.

—— Old-age security [as found by the National Civic Federation].
New York State Conference on Social Work, Quarterly Bulletin, January, 1930, v. 1, No. 1, pp. 21–35.

SARGENT, NOEL.
This question of public pensions.
Savings Bank Journal, April, 1930, No. 2, pp. 7, 8.

SCHMIDT, EMERSON P.
The present impasse of old-age pensions.
Social Science (Pi Gamma Mu, Winfield, Kans.), February, 1930, v. 5, pp. 157–166.

SHEPHERD, WILLIAM G.
Pull down the poorhouse.
Collier's, June 28, 1930, v. 85, pp. 10, 11.

SPRINGER, GERTRUDE.
A new year for the old.
Survey, January 15, 1931, v. 65, pp. 434, 435.
Working of pension laws in New York and California and prospects for new acts in other States.

STACK, MAURICE.
Old-age pensions in the United States.
International Labor Review, February, 1931, v. 23, pp. 203–226.

UNITED STATES. *Bureau of Labor Statistics.*
Extent, distribution and causes of old-age dependency.
Monthly Labor Review, April, 1930, v. 30, pp. 9–16.

—— —— Operation of public old-age pension systems in the United States, 1930.
Monthly Labor Review, June, 1931, v. 32, pp. 1–14.

—— —— Status of old-age pension legislation in the United States.
Monthly Labor Review, July, 1929, v. 29, pp. 21–28.

WARY, C. O.
The case against State old-age pensions. Some reasons for the exercise of care and caution in the matter of charitable legislation.
Industrial Relations, March 21, 1931, v. 2, pp. 109–113.

Proposals for Federal Legislation

[Bills to provide or investigate old-age pensions, 1929–1931]:
71st Congress: H. R. 1199; H. R. 3244; H. R. 3722; H. R. 6875; H. R. 8814; H. R. 13016; H. R. 15776; H. R. 15924; H. R. 17241; H. Res. 23; H. Res. 48; H. Res. 167; S. 3257; S. 5501; S. 5675; S. Res. 70.
72d Congress: H. R. 45; H. R. 124; H. R. 173; H. R. 5103; H. R. 5339; H. R. 6309; H. R. 6595; H. R. 6745; H. R. 7429; H. R. 7926; H. R. 8765; H. Res. 100; S. 2172; S. 2757; S. 3037.

H. R. 8765 was reported by the House Committee on Labor, February 5, 1932 (H. Rept. No. 375).

DILL, CLARENCE C.
Old-age pensions.
Congressional Record, January 30, 1931, v. 74, pp. 3579–3581.

GOLDSBOROUGH, T. ALAN.
Old-age pensions.
Congressional Record, June 12, 1930, v. 72, p. 10579.

KELLY, CLYDE.
Definite policy sought as basis of old-age care. Representative Kelly discusses problem. Committee on Labor in House will consider pending bills.
United States Daily, November 7, 1929, pp. 1, 14.

LAMPERT, FLORIAN.
Old-age pensions.
Congressional Record, July 3, 1930, v. 72, pp. 12634–12635.

MCKEOWN, TOM D.
[Speech advocating Government aid to old-age pensions.]
Congressional Record, January 8, 1930, v. 72, pp. 1266–1268.

SELVIG, CONRAD G.
Old-age pensions.
Congressional Record, July 1, 1930, v. 72, p. 12215.

Partly reprinted in the United States Daily, August 21, 1930.

ZIHLMAN, FREDERICK N.
Old-age pensions.
Congressional Record, July 3, 1930, v. 72, pp. 12683–12686.

Includes his bill, H. R. 13016, to encourage and assist the States in providing old-age pensions.

UNITED STATES. *Congress. House. Committee on Labor.*
Old-age pensions. Hearings . . . February 20, 21 and 28, 1930. Washington, 1930. 343 pp.

William F. Kopp, chairman.

H. R. 1199, H. R. 6875, and H. R. 8814 were before the committee, but the hearings covered the subject generally, with testimony presented for and against old-age pension legislation.

Constitutionality of Federal old-age assistance legislation, by J. P. Chamberlain, pp. 76–78; Statistical data regarding old-age dependency, care of aged, etc., furnished by the United States Bureau of Labor Statistics, pp. 248–280; State old-age pension laws, pp. 30–40, 291–314, 339–343; Comparative analysis of State laws, pp. 317–323.

Summary in Monthly Labor Review, April, 1930, v. 30, pp. 731–734.

UNITED STATES. *Congress. Senate. Committee on Pensions.*
Old-age pensions. Hearing before a subcommittee . . . on S. 3257, a bill to encourage and assist the States in providing pensions to the aged, February 24, 1931. Washington, 1931. 175 pp.

Thomas D. Schall, chairman.

Testimony in favor by Senator Dill, Harry Riseman, Abraham Epstein, J. M. Morin and others; opposed by J. C. Gall, W. E. Odom, and Noel Sargent.

State Legislation and Discussion, 1929 to 1931

The following States (and Alaska) have adopted old-age pension laws (as of December, 1931):
Alaska, California, Colorado, Delaware, Idaho, Kentucky, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Hampshire. New Jersey, New York, Utah, West Virginia, Wisconsin, Wyoming.[2]

California

[Law passed in 1929 (ch. 530), amended 1931 (ch. 608). Provides for State supervision of city and county aid to the aged. Printed in Monthly Labor Review, July, 1929, v. 29, pp. 24–28.]

CALIFORNIA TRIUMPHANT! A mandatory old-age pension law will become effective in the Golden State on January 1, 1930.
Eagle Magazine, July, 1929, v. 17, No. 7, pp. 5–7, 39, 40.

DE TURBEVILLE, ESTHER.
California adopts old-age pensions.
American Labor Legislation Review, September, 1929, v. 19, pp. 291–293.

—— Since California began to pension its aged.
(*In* National Conference on Old Age Security, 3d, New York, 1930, Report of proceedings, pp. 45–51.)

Colorado

[Law of 1927 (ch. 143) amended in 1931 (ch. 131) to adopt compulsory features.]

Connecticut

MANUFACTURERS ASSOCIATION OF CONNECTICUT (INC.).
Old-age dependency in Connecticut. Hartford, Conn. [1931.] 180 pp.

Submitted to the General Assembly, 1931. Includes description of pension systems in foreign countries and the United States.

Bibliography, pp. 171–180.

Delaware

[Law passed in January, 1931 (ch. 85). All the cost of pensions to be borne by the State. Analyzed in Monthly Labor Review, April, 1931, v. 32, pp. 86, 87.]

DELAWARE PENSION LAW GREAT DU PONT VICTORY. Alfred I. duPont aids aged while sponsoring legislation.
Old Age Security Herald, March, 1931, v. 5, No. 3, p. 3.

Idaho

[Act passed February, 1931 (ch. 16) establishes an old-age pension commission in counties. Analyzed in Monthly Labor Review, June, 1931, v. 32, pp. 82, 83.]

IDAHO OLD-AGE PENSION LAW.
Idaho State Federation of Labor, Year book, v. 2, 1931, pp. 20–22, 24, 26.

Illinois

KAILIN, HARVEY.
The old-age security movement in Illinois.
Weekly News Letter (Illinois State Federation of Labor), February 7, 1931, v. 16, No. 45, p. 1.

[2] For table showing the "Chief features of the old age pension bills in the 1931 legislatures," see Old Age Security Herald, March, 1931, pp. 6–7; see also "Fourteen governors demand old-age pensions" in same journal, February, 1931, p. 1.

Summary in Monthly Labor Review, April, 1930, v. 30, pp. 731-734.

SODERSTROM, R. G.
Renew battle for old-age pension bill.
Weekly News Letter (Illinois State Federation of Labor), December 27, 1930, v. 16, No. 39, p. 1.

Kentucky

KENTUCKY. *Bureau of Agriculture, Labor and Statistics.*
The elder worker: Restricted employment, annuities, relief, by John Walker Rogers. [Frankfort, Ky., 1929.] 45 pp. (Bul. No. 35.)
"The Kentucky old-age pension law," pp. 29-31.
Bibliography, pp. 40-45.

Maryland

SATURDAY NIGHT CLUB, *Baltimore.*
A study of old-age dependency in the city of Baltimore, 1930. [Baltimore, 1930.] 16 pp.

Massachusetts

[Act of 1930 (ch. 402) provides for relief to the aged. Analyzed in Monthly Labor Review, August, 1930, v. 31, pp. 52, 53, and in American Labor Legislation Review, September, 1930, v. 20, pp. 328, 329.]

CONANT, RICHARD K.
Old age assistance: the Massachusetts plan.
(*In* National Conference of Social Work, Proceedings, 1930, pp. 301-308.)

MASSACHUSETTS DEMANDS PENSIONS.
Old Age Security Herald, March, 1930, v. 4, No. 3, p. 2.
Hearings on the bill before the State legislature.

Michigan

MICHIGAN. *Old Age Pension Commission.*
[Report to Legislature, February 11, 1931.]
The bill proposed by the Commission (House bill No. 197) passed the House of Representatives but failed in Senate.

MICHIGAN OLD AGE PENSION LEAGUE.
Old-age pension bill. [Lansing? Michigan Federation of Labor, 1930.] 8 pp.

Minnesota

[A law establishing a county-State pension system passed in March, 1929 (ch. 47).]

GOOD ARGUMENTS BUT BAD PLAN.
American Labor Legislation Review, June, 1929, v. 19, p. 154.
Comment on the report of a committee of the State Senate recommending an old-age pension system, and on the law passed later.

OLD-AGE PENSION MOVEMENT IN MINNESOTA.
Monthly Labor Review, January, 1931, v. 32, p. 93.
Results of elections in which counties voted on the system.

Montana

MARTIN, G. I.
Operation of the Montana old-age pension law [of 1923].
Monitor, April, 1930, v. 16, pp. 219, 220.

New Hampshire

[Law providing for relief to the aged enacted May, 1931 (ch. 165). Analyzed in Monthly Labor Review, September, 1931, v. 33, pp. 59, 60.]

NEW HAMPSHIRE. *Supreme Court.*
Proposed old-age pension law of New Hampshire held to violate the principle of separation of powers.
Law and Labor, April, 1931, v. 13, pp. 87-89.
Opinion on Senate bill No. 3, 1931. The bill was changed to meet objections of the court and passed.

New Jersey

[Act of April, 1931 (ch. 219) provides for a county-State system of old-age pensions. Analyzed in Monthly Labor Review, June, 1931, v. 32, pp. 85, 86.]

NEW JERSEY. *Commission on Old Age Insurance and Pensions.*
Report, January, 1929. 8 pp.
Theodore L. Bierck, chairman.

—— *Pension Survey Commission.*
Report, No. 1–2. Trenton, 1931. 2 vols.
Roy T. Yates, chairman.
No. 1 (February, 1931) contains recommendations on establishment of county welfare boards and on State aid for relief of old age. No. 2 (October, 1931): State, county and municipal expenditures for dependency relief, 1929–1931.

WINSLOW, EMMA A.
State care of poor in New Jersey. Old-age pension law recently enacted is an addition to already comprehensive system existing.
Manufacturers' Association Bulletin, July, 1931, v. 18, No. 9, pp. 9, 10.

New York

[Law passed April, 1930 (ch. 387). A State-county system of relief provided. Analyzed in Monthly Labor Review, June, 1930, v. 30, pp. 82, 83.]

NEW YORK (State). *Commission on Old Age Security.*
Old-age security. Report, February 17, 1930. Albany, 1930. 692 pp. (Legislative document (1930) No. 67.)
Seabury C. Mastick, chairman.
PARTIAL CONTENTS: Pt. I. Economic and administrative problems. 1. The aged in the State of New York. 2. The extent of old-age need. 3. Human depreciation. 4. Income and employment. 5. Public and private pension systems. 6. Savings and insurance. 7. Old-age assistance legislation in other States. 8. Experience under American legislation. 9. Foreign laws and experience. 10. Reports of commissions in other States. Pt. II. Relief and the aged.
Conclusions and recommendations of the commission reprinted in U. S. Congress, House, Committee on Labor, Hearings, 1930, p. 281–289, and in American Labor Legislation Review, March, 1930, v. 20, pp. 73–82.
Brief excerpts from testimony before the commission, in Old Age Security Herald, October, 1929, January, 1930.

BARKIN, SOLOMON.
Some disclosures of the report of New York State Commission on Old Age Security.
Old Age Security Herald, November, 1930, v. 4, No. 11, pp. 3, 4.

FISHER, GLADYS.
Three score and ten in 1931.
Survey, August 15, 1931, v. 66, pp. 463, 464.
Problems met in administering the old-age relief act of New York.

MASTICK, SEABURY C.
The old-age security act of the State of New York.
(*In* Deutsch Foundation Conference, *Chicago University*, 1930: The care of the aged; Proceedings, pp. 83–94.)
Also in Social Service Review, June, 1930, v. 4, p. 210–221.

NEW YORK COUNTIES PROTEST BURDEN OF OLD-AGE LAW.
Eastern Underwriter, December 12, 1930, v. 31, No. 53, p. 4.
Reprinted from New York Herald-Tribune.

OPERATION OF OLD-AGE PENSIONS IN NEW YORK STATE.
Monthly Labor Review, November, 1931, v. 33, p. 79.
Data supplied by the New York State Department of Social Welfare.

ROOSEVELT, FRANKLIN D.
Unemployment and old-age pensions.
(*In* Governors' Conference, Proceedings, 1930, pp. 18–24.)
Excerpts in Old Age Security Herald, August, 1930, p. 1.

SCHNEIDER, DAVID M.
Extending relief for old age in New York State.
United States Daily, January 13, 1932, p. 2568, cols. 5, 6.
Review of operation of the law for the first 11 months of 1931.

and passed.

SEAGER, HENRY R.
Need of provision for the aged in New York.
American Labor Legislation Review, March, 1930, v. 20, pp. 68–72.

SHERMAN, PHILEMON T.
Old-age security; public assistance for dependent aged. Statements before New York State Commission, December 4, 1929. Criticisms of the pension plan and alternative recommendations. New York City [1929]. 19 pp.

Ohio

ODOM, WILLIAM E.
A survey of poor relief systems and care provided for aged dependents in the State of Ohio. [2d ed.] Cincinnati, Industrial Association, 1930. 16 pp.

OHIO STATE FEDERATION OF LABOR.
Report of the legislative agent, Thos. J. Donnelly, 89th session, 1931. [Columbus, 1931.] 52 pp.
Old-age pension bills in the legislature, pp. 34–36.

RUSSELL, MEIGS B.
How the Ohio bill died.
Old Age Security Herald, May, 1931, v. 5, No. 5, p. 6.

Utah

[Law establishing a county system passed in March, 1929 (ch. 76).]

PAUL, J. H.
How Utah pensions its aged.
(*In* National Conference on Old Age Security, *3d, New York*, 1930, Report of proceedings, pp. 51–57.)

West Virginia

[Act passed March, 1931 (ch. 32) establishes a county system. Analyzed in Monthly Labor Review, June, 1931, v. 32, p. 84.]

Wisconsin

[The old-age pension law of 1925 (ch. 121) was amended in 1929 (ch. 181) and in 1931 (ch. 109).]

WISCONSIN. *State Board of Control.*
Old-age pensions in Wisconsin, 1928. [Madison, 1929.] 14 pp.
Report of operation of the law of 1925. The tables, with later data, were reprinted in Monthly Labor Review, April, 1930, v. 30, pp. 734–736.

GLASSBERG, BENJAMIN.
The Wisconsin law.
(*In* National Conference on Old Age Security, *3d, New York*, 1930, Report of proceedings, 1930, pp. 61–67.)

—— Wisconsin's experience with the old-age pension law.
(*In* Deutsch Foundation Conference, *Chicago University*, 1930: The care of the aged; Proceedings, pp. 95–102.)

HEINEMANN, FRED V.
Statement [on administration of the Wisconsin law].
(*In* Old-age pensions. Hearings before the Committee on Labor, [U. S.] House of Representatives, February, 1930, pp. 53–66.)

WISCONSIN MAKES PENSIONS MANDATORY. Abandons optional system to spread benefits of pensions throughout 71 counties.
Old Age Security Herald, July–August, 1931, v. 5, No. 7–8, p. 1.

Wyoming

[A State-county system was established by act of 1929 (ch. 87.).]

PUBLICATIONS RELATING TO LABOR

Official—United States

ALASKA.—Governor. *Annual report to the Secretary of the Interior, for fiscal year ended June 30, 1931. Washington, Department of the Interior, 1931. 162 pp., maps, charts, illus.*

Data on wages and labor conditions, taken from this report, are given in this issue of the Labor Review.

KENTUCKY.—Department of Agriculture, Labor, and Statistics. *Biennial report, July 1, 1929, to June 30, 1931. Frankfort, 1931. 201 pp.*

NEW JERSEY.—Board of Trustees, State Employees' Retirement System. *Ninth annual report, June 30, 1931. Trenton, [1931?]. 32 pp.*

NEW YORK.—Department of Labor. Division of Industrial Hygiene. *Chrome poisoning, its cause and prevention. Albany, 1931. 22 pp., illus.*

A list of the industries in which chrome poisoning is a hazard is included in the report, and a summary is given of recent studies of the extent of the hazard in chromium-plating plants and lithographing plants in New York.

WISCONSIN.—Industrial Commission. *Bureau of Unemployment Research Series, No. 2: Administration of public and private relief in times of unemployment. A statement of desirable methods of administration, public and private agency responsibility, and working relations between public and private agencies. Madison, 1931. 20 pp.*

—— Legislative Interim Committee on Unemployment. *Report. Madison, Industrial Commission, [1931?]. 114 pp., charts.*

This report contains statements as to the extent of unemployment in Wisconsin, the methods being used by the State and private agencies to alleviate conditions, and recommendations for further action. Recommendations are summarized in a majority and a minority report and suggested bills are given in full.

UNITED STATES.—Congress. Senate. Committee on Manufactures. *Establishment of national economic council. Hearings (72d Cong., 1st sess.) on S. 6215 (71st Cong.), a bill to establish a national economic council, October 22 to December 19, 1931. Washington, 1932. 777 pp., charts.*

—— —— —— —— *Unemployment relief. Hearings (72d Cong., 1st sess.) on S. 174 and S. 262, December, 1931, and January, 1932. Washington, 1932. 380 pp.*

—— Department of Commerce. Bureau of Foreign and Domestic Commerce. *Trade Information Bulletin No. 785: Porto Rico—what it produces and what it buys. Washington, 1932. 61 pp.*

Contains some information on labor supply and demand and average daily earnings.

—— —— Bureau of Mines. *Bulletin 341: Coal-mine fatalities in the United States, 1929, by William W. Adams. Washington, 1931. 120 pp.*

Reviewed in this issue.

—— —— —— *Bulletin 342: Metal-mine accidents in the United States during the calendar year 1929, by William W. Adams. Washington, 1931. 99 pp.*

Reviewed in this issue.

—— —— —— *Monograph 4: Warning agents for fuel gases. Washington, 1931. 177 pp., diagrams, illus.*

This study was undertaken to determine the most suitable substances for addition to fuel gases in order to give warning of their presence to consumers and employees.

UNITED STATES.—Department of Commerce. Bureau of Mines. *Technical Paper 503: Accidents at metallurgical works in the United States during the calendar year 1929, by William W. Adams. Washington, 1931. 32 pp.*

Reviewed in this issue.

—— —— Bureau of Navigation. *Merchant marine statistics, 1931. Washington, 1931. 115 pp.*

Data on wages of seamen on American and foreign vessels, taken from this report, are given in this issue of the Labor Review.

—— —— Bureau of Standards. *Building and Housing No. 14: Recommended minimum requirements for fire resistance in buildings (report of the Department of Commerce Building Code Committee). Washington, 1931. 58 pp.*

—— —— Bureau of the Census. *Fifteenth Census of the United States, 1930: Unemployment, Vol. I—Unemployment returns by classes for States and counties, for urban and rural areas, and for cities with a population of 10,000 or more. Washington, 1931. 1112 pp.*

The results of the unemployment census were first published in a series of separate bulletins for the individual States, each entitled "Unemployment Bulletin—Unemployment Returns by Classes," with an additional bulletin summarizing the information for the United States as a whole and entitled "United States Summary—Unemployment Returns by Classes." The present volume assembles under one cover all of these separate bulletins.

—— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 548: Decisions of courts and opinions affecting labor, 1929–1930. Washington, 1931. 521 pp.*

—— —— —— *Bulletin No. 557: Wages and hours of labor in the men's clothing industry, 1911 to 1930. Washington, 1932. 59 pp.*

An advance summary of the data obtained in this survey was published in the Labor Review for March, 1931 (pp. 162–168).

—— Employees' Compensation Commission. *Fifteenth annual report, July 1, 1930, to June 30, 1931. Washington, 1931. 129 pp.*

Reviewed in this issue.

—— Federal Farm Board. Division of Cooperative Marketing. *Beginnings of cooperative tobacco marketing. Washington, 1931. 18 pp. (Mimeographed.)*

—— —— —— *Cooperative marketing of tobacco: A selective list of references. Washington, 1931. 8 pp. (Mimeographed.)*

—— Federal Trade Commission. *Annual report for the fiscal year ended June 30, 1931. Washington, 1931. 241 pp.*

—— —— *Resale price maintenance. Part I.—General economic and legal aspects. Washington, 1929. 141 pp. (Published as H. Doc. No. 546, 70th Cong., 2d sess.)*

—— —— —— *Part II.—Commercial aspects and tendencies. Washington, 1931. 215 pp.*

Official—Foreign Countries

CANADA.—Bureau of Statistics. *Canada, 1932: The official handbook of present conditions and recent progress. Ottawa, 1932. 192 pp., maps, charts, illus.*

GREAT BRITAIN.—Board of Trade. *Final report on the third census of production of the United Kingdom (1924): The chemical and allied trades; the leather, rubber, and canvas goods trades; the paper, printing, and allied trades; and miscellaneous trades. London, 1931. xv, 468 pp.*

—— Department of Overseas Trade. *Economic conditions in Palestine, July, 1931. Report by K. W. Stead. London, 1931. 48 pp.*

A review of a section of this report is given in this issue.

GREAT BRITAIN.—Government Actuary's Department. *National health insurance: Report by the Government actuary on third valuation of the assets and liabilities of approved societies. London, 1931. 97 pp. (Cmd. 3978.)*

While the position revealed by this third valuation is complex, "its predominant feature is the magnitude of the aggregate surplus and the substantial additional benefits inuring to a large proportion of the insured population." Much of this surplus has been carried forward, thus strengthening the position of the societies concerned. There are, however, two disquieting factors—the increase in the sickness rate, with the consequent increased claims for benefit, and the falling off of contributions owing to the widespread unemployment. As to the first, the author of the report dismisses the theory that the increased sickness is a natural result of the changed economic conditions brought about by unemployment, saying that the difference is too great to be explained on this ground. The suggestion is made that the conditions for granting benefit, especially in the case of women, should be more rigidly administered. As to the second difficulty, it is suggested that if the present degree of unemployment continues, it may become necessary to reconsider the concession made to those who have fallen into arrears as a result of proved unemployment.

—— Ministry of Labor. Advisory Committee on Draft Regulations. *Unemployment insurance (No. 3) act, 1931. Report. London, 1931. 12 pp.*

Under the so-called "anomalies act," passed in August, 1931, the Minister of Labor was given power, after consultation with an advisory committee, to issue regulations affecting the insurance rights of seasonal workers, part-time workers, and married women. This report contains the findings of the advisory committee on the draft of the proposed regulations which was laid before them. The regulations finally put into force are summarized in the Labor Review, December, 1931, p. 74.

—— Registry of Friendly Societies. *Report for the year 1930. Part 2: Friendly societies. London, 1931. 29 pp.*

INTERNATIONAL LABOR OFFICE.—*Abolition of fee-charging employment agencies. (First item on agenda of International Labor Conference, 16th session, 1932, 1st discussion.) Geneva, 1932. 139 pp.*

Includes a general survey of the subject under discussion, a résumé of law and practice on fee-charging employment agencies in different countries, and suggestions for a solution of the problems involved in such agencies.

—— *Invalidity, old-age, and widows' and orphans' insurance. (Second item on agenda of International Labor Conference, 16th session, 1932, 1st discussion.) Geneva, 1932. 312 pp.*

An analysis of invalidity, old-age, and widows' and orphans' insurance, under the following topics: Scope, risks covered and benefits, financial resources, financial organization, administrative organization, settlement of disputes, position of foreigners, and maintenance of migrants' pension rights.

—— *Studies and Reports, Series B, No. 18: The social aspects of rationalization. Geneva, 1931. 381 pp.*

Unofficial

AMERICAN ASSOCIATION OF PERSONAL FINANCE COMPANIES. *Seventeenth annual convention, Washington, D. C., October 21–23, 1931. General subject: Consumer credit and personal finance. [Washington, D. C. ?], 1931. 328 pp.*

AMERICAN STANDARDS ASSOCIATION. *Safety code for elevators, dumbwaiters, and escalators. New York, 29 West 39th Street, 1931. 173 pp.*

Reviewed in this issue.

AMERICAN WOMAN'S ASSOCIATION. *The trained woman and the economic crisis: Employment and unemployment among a selected group of business and professional women in New York City. New York, 353 West 57th Street, 1931. 102 pp.*

A study made by the American Woman's Association, an organization of business and professional women, covering 1,937 of its own membership. The report deals with the situation as it was in February, 1931.

BUECHNER, F. ROBERT. *Municipal self-insurance of workmen's compensation. Chicago, University of Chicago Press, 1931. 72 pp.*

Conclusions and recommendations, based on a study of methods of handling compensation insurance in eight small or medium-sized cities in Michigan and Virginia, in answer to the question, Can a municipality afford to carry its own compensation insurance where elective?

COMMITTEE ON LABOR INJUNCTIONS. *Labor injunctions. New York, 100 Fifth Avenue, 1931. 8 pp.*

—— *The Federal anti-injunction bill. New York, 100 Fifth Avenue, 1931. 8 pp.*

FAMILY WELFARE ASSOCIATION OF AMERICA. *Community planning for homeless men and boys—the experience of 16 cities in the winter of 1930–31, by Robert S. Wilson. New York, 130 East 22d Street, 1931. xiv, 144 pp.*

This volume is divided into three parts covering in turn the experience of 16 cities in dealing with men and boys, the essentials for a community program, and the homeless man as an individual.

FILENE, EDWARD A. *Successful living in this machine age. New York, Simon & Schuster, 1931. 274 pp.*

The author claims that poverty and unemployment are no longer necessary and that there is no need for us even to learn another industrial technique. However, he holds that it is essential to apply the technique which we have already learned, namely, mass-production technique, to this age in which individual prosperity is so deeply dependent upon the prosperity of all the people.

HALBERT, BLANCHE, Editor. *The better homes manual. Chicago, University of Chicago Press, 1931. 781 pp., diagrams, illus.*

HOROVITZ, SAMUEL B. *Practice and procedure under the Massachusetts workmen's compensation law, with forms. Boston, Eugene W. Hildreth, 1930. 176 pp.*

A reference book, describing the various steps in compensation practice and procedure under the Massachusetts act. It contains quotations of the pertinent statutes, explanations of the actual practice now in effect, and citations of authoritative decisions of the superior and supreme judicial courts of the State.

HULVEY, CHARLES NEWTON, AND WANDEL, WILLIAM HAMLIN. *Workmen's compensation and automobile liability insurance in Virginia. New York, Century Co., 1931. 203 pp. (Publication of Institute for Research in the Social Sciences, University of Virginia.)*

A study of the social effects of casualty insurance and the relationship of the State to insurance administration. The technique of rate-making and the policy of the State in regulation of rates are described in detail for workmen's compensation insurance in the first part, and for automobile liability insurance in the second part, which also reviews the trend toward compulsory automobile insurance.

KEYNES, JOHN MAYNARD, and others. *Unemployment as a world problem. Chicago, University of Chicago Press, 1931. 261 pp. (Lectures on the Harris Foundation, 1931.)*

LESCOHIER, DON D. *Our unemployment problem. Madison, Industrial Commission of Wisconsin, 1931. 20 pp.*

An address to the Wisconsin Master Builders' Association on February 12, 1931.

LEWIS, EDWARD E. *The mobility of the Negro: A study in the American labor supply. New York, Columbia University Press, 1931. 144 pp., maps.*

A study of Negro migration during the period 1919 to 1924, made under the auspices of the Social Science Research Council and the Columbia University Council for Research in the Social Sciences.

MCCORD, CAREY P., M. D., AND ALLEN, FLOYD P., M. D. *Industrial hygiene for engineers and managers. New York, Harper & Bros., 1931. 336 pp., illus.*

This volume brings together the material presented to students in the engineering courses of the University of Cincinnati during the past 10 years. It is designed more for the engineer or manager in industry who should be conversant with the requirements of good industrial hygiene than for the engineer who is a qualified industrial hygienist. It deals with emergency aid for the industrially injured, occupational diseases, accident prevention, industrial fatigue, compensation for industrial accidents and diseases, and various special services, such as dental departments and physical examinations and other measures for the safety and health of the workers.

MINNESOTA, UNIVERSITY OF. Bureau for Research in Government. *Publication No. 9: The administration of workmen's compensation in Minnesota, by Lloyd A. Wilford. Minneapolis, University of Minnesota Press, 1930. 35 pp.*

A condensed revision of the original study, describing the development of workmen's compensation legislation in Minnesota, the substantive provisions of the legislation, the functions and work of the administrative officers, and the present procedure in claim settlements.

NATIONAL SAFETY COUNCIL. *1931 transactions of the National Safety Council: twentieth annual safety congress, Chicago, October 12 to 16, 1931. Chicago, 20 North Wacker Drive, 1932. 3 vols.*

The proceedings of the individual sections have been published in separate pamphlets.

NATIONAL URBAN LEAGUE. Department of Industrial Relations. *Unemployment status of Negroes: A compilation of facts and figures respecting unemployment among Negroes in 106 cities. New York, 1133 Broadway, 1931. 56 pp.*

NEIFELD, M. R. *Credit unions in the United States. (Reprinted from Journal of Business of the University of Chicago, Vol. IV, No. 4, October, 1931, pp. 320–345.)*

The writer, who is the statistician of the Beneficial Management Corporation, New York City (an organization which acts as manager of certain personal finance or small-loan companies), examines the credit-union movement from the point of view of economy of operations, field of membership, development of thrift, etc.

PRINCETON UNIVERSITY. Department of Economics and Social Institutions. Industrial Relations Section. *Selected bibliography: Unemployment prevention, compensation, and relief—company, trade-union, and public programs. Princeton, January 28, 1932. 4 pp. (2d supplement to bibliography prepared September, 1931.)*

RUSSELL SAGE FOUNDATION. Library. *Bulletin No. 110: Labor and industry—a selected bibliography. New York, 130 East 22d Street, December, 1931. 4 pp.*

UNGER, EDNA W., AND BURR, EMILY T. *Minimum mental age levels of accomplishment: A study of employed girls of low-grade intelligence. Albany, University of the State of New York, 1931. 107 pp., charts.*

Reviewed in this issue.

WALTERS, J. E. *Applied personnel administration. New York, John Wiley & Sons (Inc.), 1931. 338 pp., diagrams.*

Prepared as a textbook for college students and as a general reference work for practical use in the solving of problems of personnel administration. According to the preface, the book does not purport to be a critical analysis of personnel administration, but is an attempt "to portray the personnel procedures which have been found helpful in decreasing and preventing human problems and in increasing human efficiency, happiness, and development in industry and business."

WELFARE COUNCIL OF NEW YORK CITY. Research Bureau. *Study 5: The care of the chronic sick in private homes for the aged in and near New York City, by Mary C. Jarrett. New York, 1931. 67 pp.*

Report based on a census, taken in the spring of 1928, of 20,754 persons being cared for by the medical and social agencies of New York City and on a detailed survey made during the same period of facilities for the care of the chronic sick, especially in the homes for the aged. The latter were studied with a view to adequacy of care and treatment, facilities for care, etc.

WHITE, L. W., AND SHANAHAN, E. W. *The industrial revolution and the economic world of to-day: A study of industrial changes and their effects in Great Britain and of contemporary economic structure. London and New York, Longmans, Green & Co., 1932. 378 pp.*

WOOD, EDITH ELMER. *Recent trends in American housing. New York, Macmillan Co., 1931. 317 pp., illus.*

Includes chapters on war housing, the housing shortage, rent restriction, tax exemption, tenement house and housing codes, growth of zoning, city and regional planning, the land question, satellite garden cities, and cooperative housing.

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